

**UNITED STATES DISTRICT COURT**  
**NORTHERN DISTRICT OF CALIFORNIA, OAKLAND DIVISION**

IN RE: NATIONAL COLLEGIATE	)	CASE NO. 14-md-2541-CW;
ATHLETIC ASSOCIATION ATHLETIC	)	14-cv-02758-CW
GRANT-IN-AID CAP ANTITRUST	)	
LITIGATION	)	
	)	
	)	
THIS DOCUMENT RELATES TO:	)	
	)	
ALL ACTIONS	)	
	)	
	)	
	)	
	)	

**REBUTTAL REPORT OF PROFESSOR JAMES J. HECKMAN**

**TABLE OF CONTENTS**

- I. Introduction ..... 2**
  - A. Background ..... 2**
  - B. Tasks ..... 2**
  - C. Summary of Conclusions ..... 2**
- II. Dr. Noll Does Not Establish a University Labor Market Monopsony ..... 6**
  - A. Universities are Multi-Dimensional Entities With Multiple Constituents and Non-Profit Motives..... 6**
  - B. Dr. Noll’s Narrow Focus is Akin to Incorrectly Viewing Student-Athletes as Selling Services in a “Spot” Labor Market, Thereby Leading to Erroneous Conclusions..... 9**
  - C. Universities Compete for Students Across Multiple Dimensions ..... 14**
  - D. Even Assuming for the Sake of Argument that Dr. Noll’s View of Student Athletics as a Short-Term, Narrow Spot Labor Market For Student Athletic Services Were Taken as Correct, Dr. Noll’s Claim that the Defendants have Operated a Monopsony Cartel in a Market for FBS Football and Division I Basketball Labor is Unsubstantiated. .... 15**
- III. Dr. Noll Ignores the Equilibrium Effects of Plaintiff’s Proposed Rule Changes, Including Adverse Effects for Some/All Class Members..... 18**
  - A. Dr. Noll Ignores the Value Produced by University Investments Over Time which Benefit Current and Future Students and the Value that Amateur Intercollegiate Sports Has for University Constituencies and Which the Plaintiffs’ Proposed Rule Changes Threaten..... 18**
  - B. Dr. Noll Ignores The Equilibrium Effects of Plaintiffs’ Proposed Rule Changes, Including Adverse Effects for Some/All Class Members, Employing Strong Unfounded Assumptions About the But-For World As the Basis for His Analysis ..... 21**
- IV. Dr. Noll’s Criticisms of the Empirical Results in *Heckman Report* Are Either Factually or Econometrically Incorrect ..... 28**
- APPENDIX A: CURRICULUM VITAE AND PAST TESTIMONY .....A-1**
- APPENDIX B: MATERIALS RELIED UPON..... B-1**
- APPENDIX C: REGRESSION RESULTS..... C-1**

## **I. Introduction**

### **A. Background**

1. My name is James J. Heckman. I am the Henry Schultz Distinguished Service Professor of Economics in the Department of Economics and the Harris School of Public Policy at the University of Chicago. I direct the Center for the Economics of Human Development at the University of Chicago.

2. I submitted a report previously in this matter, on March 21, 2017.<sup>1</sup> The full listing of my background is included in that report, and an updated CV is attached here as Appendix A.

### **B. Tasks**

3. I have been asked by counsel for the NCAA to review the rebuttal report of Roger Noll in this litigation, as well as related materials, and to respond to the few, minor criticisms Dr. Noll raises related to my report, the proper interpretation of my results, his claimed monopsonistic input labor markets for student-athlete labor, and the relevance of my findings with respect to the assumptions and conclusions Dr. Noll develops in his report.

### **C. Summary of Conclusions**

4. My primary finding is that Dr. Noll makes fundamental economic errors, unsupported assumptions, and provides no clear theoretical model or any empirical analysis to support his conclusions, thereby providing no reliable basis for his conclusion of anticompetitive harm to class members.<sup>2</sup> In particular:

---

<sup>1</sup> Expert Report of Professor James J. Heckman, March 21, 2017 (henceforth *Heckman Report*).

<sup>2</sup> Dr. Noll claims that “defendant’s economic experts do not offer any valid economic arguments or evidence that the conduct at issue in this litigation – the current limits on the compensation that can be received by a member of one of the three classes – is anything other than a collusive price-fixing agreement among horizontal competitors that causes anticompetitive injury in the relevant markets for college students who play FBS football or Division I men’s or women’s basketball, and that this collusive agreement has no reasonable business justification.” Declaration of Roger G. Noll, May 16, 2017 (henceforth *Noll Report*), p. 2.

- **Dr. Noll does not establish a university labor market monopsony or monopsony effects in such an assumed market.**
- **Dr. Noll ignores the equilibrium effects of Plaintiffs' proposed rule changes, including adverse effects for some/all class members.<sup>3</sup>**
- **Dr. Noll's criticisms of the empirical results in the *Heckman Report* are either factually or econometrically incorrect.**

5. As further discussed in Section II, Dr. Noll does not establish a university labor market monopsony for student athletes. In adopting a narrow labor market view, he ignores many of the short-term and long-term human capital benefits that student-athletes receive, as the work in my previous report and my extensive academic work show, which go well beyond the direct financial support of athletic scholarships to include benefits of training, mentoring, classroom education, exposure to diverse communities, publicity, developing self-discipline, leadership and time management skills, as well as many other benefits. In ignoring or improperly analyzing these factors, Dr. Noll improperly divorces the student-athlete and student-athletics from their broader relationship with the university. As a result, he draws incorrect and speculative conclusions about universities as monopsony purchasers of athletic labor inputs for FBS football and Division I basketball.

6. Dr. Noll's narrow view of student athletics as essentially a "spot" (i.e., short-term money wage-related) labor market monopsony is incorrect and unsupported. It ignores the broader,

---

<sup>3</sup> Throughout the report, I refer to "Plaintiffs' proposed rule changes" as described by Judge Wilken: "Consolidated Plaintiffs and Jenkins Plaintiffs allege in their complaints that the NCAA and its member institutions violate federal antitrust law by conspiring to impose the cap on the amount of monetary and in-kind compensation a school may provide a student-athlete. Plaintiffs assert that, without the NCAA's cap on compensation, schools would compete in recruiting student-athletes by providing more generous compensation. Plaintiffs seek an injunction against the NCAA's rules limiting compensation for student-athletes." Order Denying Motion for Judgment on the Pleadings, pp. 2-3.

multidimensional nature of the relationship between students and universities, which is a crucial component for analyzing both current policies and Plaintiffs' proposed rule changes. The *Heckman Report* provides empirical evidence of the broader relationship and is relevant to analyzing Plaintiffs' proposed rule changes in those relationships. In particular, Dr. Noll's overly simplistic view of the university-student relationship as an employer/employee relationship for athletic labor misses the complex process of matching between students (both for student-athletes and non-athletes) and universities across many dimensions, and the dimensions on which competition across universities for students occurs. These many dimensions are of importance to students in choosing where to attend college, including whether to participate at all in intercollegiate athletics. Dr. Noll's essentially "spot" labor market framework for analyzing university-student relationships is erroneous and is the basis for erroneous conclusions.

7. In addition, as discussed further in Section II, Dr. Noll has not substantiated his claim that defendants operate a monopsony cartel using reliable theoretical foundations and empirical tools typically used by economists. For Dr. Noll's claim - that the current NCAA rules at issue here are nothing but a collusive pricing arrangement causing anticompetitive injury - to be true, the NCAA and defendant Conferences would have to act as a successful monopsonist labor-purchasing cartel for FBS football and Division I basketball players. Dr. Noll does not even discuss, much less examine, the economic criteria for a labor market to be a monopsony, or establish that there is one in operation here. Similarly, Dr. Noll presumes but does not provide any reliable evidence that a monopsony "wage" prevails in his alleged national market for FBS and Division I basketball student-athletes, or that student-athletes in these sports are "compensated" currently at a lower "wage" than in a non-monopsony counterfactual world. Therefore, he cannot provide any reliable basis to conclude economic harm to the classes.

Indeed, Dr. Noll never attempts to estimate the alleged current monopsony markdown, but rather merely assumes it. The *Heckman Report*, to the contrary, provides empirical evidence that student-athletes are not exploited, but instead receive substantial benefits from attending college and participating in intercollegiate athletics in the current framework of athletics-based educational support.

**8.** As discussed further in Section III, Dr. Noll ignores and incorrectly dismisses the way in which the current financial support rules add value in creating the amateur intercollegiate sport product itself. He also baselessly dismisses potential harm to class members and the many other constituencies of the university as a consequence of granting Plaintiffs' proposed rule changes.

**9.** In addition, as I discuss further in Section III, Dr. Noll ignores the equilibrium effects of Plaintiffs' proposed rule changes, including adverse effects for some or all class members, and invokes a strong, unfounded assumption about the but-for world as the basis for his conclusions. In particular, Dr. Noll assumes, contrary to economic logic, that Plaintiffs' proposed rule changes would result in all other aspects of the student-athlete relationship with the university (e.g., provisional financial support, mentoring, coaching, visibility) remaining unchanged by the university athletic program and the university.

**10.** Dr. Noll does not acknowledge that many plausible counterfactual outcomes may arise from Plaintiffs' proposed rule changes. He ignores and dismisses, without reliable or in some cases, any evidence, plausible adverse outcomes that may arise from these possible changes, selecting only the most positive (and implausible) outcome in which these same student-athletes all are "paid" more and nothing else changes. In particular, he ignores the rich menu of items in the full array of current benefits to student-athletes and how these might be diminished as one component of the package changes. The findings in my report provide

empirical evidence of the substantial benefits to student-athletes attending college and participating in intercollegiate athletics, and the increased access to those opportunities, especially for those from disadvantaged backgrounds. To the extent that Plaintiffs' proposed rule changes reduce the opportunities to attend college and participate in intercollegiate athletics, my work suggests diminished benefits to some portion of the classes, and not uniform benefits to the classes, as Dr. Noll apparently believes.

**11.** Dr. Noll does not dispute my central findings in the *Heckman Report*, but nevertheless raises a few criticisms that, although minor, are all either factually or econometrically incorrect. I respond to these criticisms in Section IV.

## **II. Dr. Noll Does Not Establish a University Labor Market Monopsony**

### **A. Universities are Multi-Dimensional Entities With Multiple Constituents and Non-Profit Motives**

**12.** In order to demonstrate the way in which Dr. Noll errs in his asserted labor market analysis of student-athletics, it is informative to begin by examining the benefits that all students, including student-athletes, receive from attending university and the complex, multidimensional relationship between students and universities. It is well-understood that the college experience opens up opportunities and vistas for all students (including student-athletes), especially those that come from disadvantaged backgrounds. The college experience also allows the individual to develop self-awareness and an understanding of what is possible in life. These views are both longstanding and well-documented in the literature on the economics of education, an area in which I have expertise and have conducted extensive research. Regarding all levels of education, Bowen and Savelle (1972) note:

“The economic returns to education are in the form of higher lifetime productivity and income of the individual who receives the education. This enhanced productivity and income derive from several sources. First, education informs its students of many career opportunities and exposes them to many subjects of study and to diverse experiences [...] Second, education enhances the versatility of people, widens their options, and reduces the risk of obsolescence or blind alleys. The advancement from one level of education to another requires that prerequisites be fulfilled. Thus the completion of each stage of education, (grade school, high school, lower division college, the baccalaureate degree, the master's degree, etc.) creates the option of still additional investments [...] Third, education helps people perform tasks they might otherwise have to pay others to perform [...] Fourth, and most important, education enhances the skill and competence of people for many special vocations and thus increases income.”<sup>4</sup>

In short, more education is better than less education for all groups and ability levels. These benefits have also been discussed in the *Heckman Report*.<sup>5</sup>

**13.** Furthermore, the missions of a university are not obviously related to revenue or profit maximization; it engages in a host of activities such as scholarly inquiry, including basic research (sometimes with no immediately foreseeable application), and educational efforts that can be interpreted as increasing the quality of the educational experience. As explained by Clotfelter et al.:

“What do career counseling, computerized reference services, planetarium shows, seminars on literary criticism, televised football games, high-energy physics experiments, fast-food operations, lectures on introductory psychology, advice on agricultural pest control, weight lifting, teacher training, and orchestra rehearsals have in common? The answer, of course, is that they are all among the many activities of colleges and universities. As suggested by the variety of these activities, the service

---

<sup>4</sup> Bowen, Howard, and Paul Servelle. “Who benefits from higher education – and who should pay?” *American Association for Higher Education* (1972), p. 22.

<sup>5</sup> See discussion in Section II (pp. 8-13) of the *Heckman Report* on the long-term benefits of human capital investment over the life-cycle.



called ‘higher education’ is in reality an amalgam of qualitatively different outputs, produced in a wide assortment of settings.”<sup>6</sup>

**14.** My findings in the *Heckman Report* provide empirical support for the human capital benefits that accrue to students attending college. My specific finding that college student-athletes’ graduation rates are at least as high as other students is relevant in supporting the contention that universities are behaving according to their stated educational (non-profit) objectives.<sup>7</sup> Universities succeed in educating student-athletes over time and across many different institutions, not by accident, but by design. A university has a mission of educating all students, in addition to other related missions. It also follows that altering incentives for both students and universities may produce very different outcomes for some students. If Plaintiffs’ requests are granted, as further detailed in Section III, these benefits will be altered. Therefore, it would be neither accurate nor complete to analyze the university solely as a profit-maximizing purchaser of student-athletic services in a spot labor market. The university’s relationship with student-athletes (as well as budding journalists, musicians, and poets, for example) is multi-faceted, and the benefits received by students translate into enhanced human capital with improved lifetime earnings and other health and social benefits.<sup>8</sup>

**15.** Furthermore, my work shows that student-athletes from disadvantaged environments may enter their freshman year with lower academic skills than other freshmen. The *Heckman*

---

<sup>6</sup> Clotfelter, Charles T., et al. "Introduction to ‘Economic challenges in higher education’” in *Economic Challenges in Higher Education*. University of Chicago Press, 1991, pp. 3-4.

<sup>7</sup> For example, see the discussion on the benefits to student-athletes in the *Heckman Report*, ¶ 13.

<sup>8</sup> For example my research (with Humphries and Varamendi, 2016) finds non-market benefits to education, and that the benefits are higher for lower-ability individuals. Heckman, James J., John E. Humphries, and Gregory Veramendi. “The non-market benefits of education and ability,” *Working Paper* (2016).

*Report* provides evidence that the graduation rates and post-graduation success of student-athletes from disadvantaged backgrounds equals or exceeds those of their non-student-athlete cohorts. A finding that such student-athletes perform “no different than” other students does not imply that intercollegiate athletics do not provide any benefits. To the contrary, it suggests that “but for” intercollegiate athletics, many of these student-athletes would be worse off. Intercollegiate athletics provides a vehicle for social mobility via college attendance, completing college successfully and earning higher wages. This evidence supports this broader view of the multidimensional relationship between students and universities.

**B. Dr. Noll’s Narrow Focus is Akin to Incorrectly Viewing Student-Athletes as Selling Services in a “Spot” Labor Market, Thereby Leading to Erroneous Conclusions**

**16.** Dr. Noll’s central focus of analyzing student-athletics is akin to nothing more than a “spot” (short-term, money wage based) labor market where athletic services are bought and sold. That view is narrow and fundamentally incorrect. A spot labor market is one in which nominal wages paid in any given period are for work provided that same period, and are the sole form of payment. According to the 2009 Nobel Prize Recipient in Economic Sciences, Oliver Williamson, a spot market is appropriate when human assets are nonspecific, separable, and meeting market tests continuously for their jobs.<sup>9</sup> One example cited by Williamson (1985) of a worker in a spot market is a migrant farm worker. One would certainly not describe intercollegiate football or intercollegiate basketball student-athletes in such a manner.

**17.** Dr. Noll discusses only athletics-related financial support, and in a manner resembling the “wage” one would receive in a spot market. But the benefits student-athletes receive

---

<sup>9</sup> Williamson, Oliver E. *The Economic Institutions of Capitalism*. Simon and Schuster, 1985, p.245.

consist of more than financial support while in college.<sup>10</sup> He ignores in his analysis the many benefits of a higher education, including training, education, mentoring, social mobility, and exposure to diverse communities, as discussed in the *Heckman Report*.<sup>11</sup> Additionally, for student-athletes, these benefits also include coaching, developing leadership, teamwork, and time management skills as well as the local, regional and national visibility they potentially receive from participating in the university's athletic program.

**18.** Dr. Noll's misplaced, narrow spot market wage framework further ignores the deferred returns to attending college and participating in intercollegiate sports. In the labor economics literature, it is well recognized that compensation may take many forms – cash, subsidies, training, publicity, screening, and deferred compensation are but a few. The idea of financial support in the form of stipends and scholarships is well-established as individuals obtain education that will pay greater rewards in the future. In fact, deferred compensation is a well-recognized principle of labor economics and is another characteristic distinguishing the current student-athlete relationship with the university from that of a “spot” labor market.<sup>12</sup> For

---

<sup>10</sup> Economists have long recognized that relationships between parties include benefits beyond short-term monetary payments. For example, Lazear and Oyer (2012) note that: “... other compensations can include standard non-cash benefits such as health care, retirement benefits, and employer-sponsored child care as well as amenities such as a large or nicely decorated office, low risk of injury or death, or a job that consists of largely interesting tasks.” At pp. 499-500. Lazear, Edward P., and Paul Oyer. “Personnel economics.” *The Handbook of Organizational Economics* (2012).

<sup>11</sup> See the discussion in *Heckman Report*, ¶¶ 36-39, about the importance of considering benefits to participation in various life stages, as well as the cumulative effects of participation in athletics, aspects that would be missed by a narrow focus on a spot market.

<sup>12</sup> Becker (1962) states, “Some activities primarily affect future well-being, while others have their main impact in the present ... Both earnings and consumption can be affected: on-the-job training primarily affects earnings, a new sail boat primarily affects consumption, and a college education is said to affect both. The effects may operate either through physical resources, such as a sail boat, or through human resources, such as a college education... activities that influence future real income through the imbedding of resources [are] called investing in human capital.” Becker, Gary S. “Investment in human

example, recent law graduates clerk with a judge for low salaries but good experience and are usually rewarded with lucrative employment offers after their clerkship, students accept low-paid summer internships, and computer science Ph.D. students at Stanford could easily earn more in the short term by quitting their program and working across the road. In fact, it is well-recognized in the literature that compensation in any particular moment in time need not be equal to an employee's productivity. In particular, in an oft-cited model by Lazear (1979), which generalizes a result in Becker and Stigler (1974), younger workers voluntarily agree to be paid less than the value of their marginal productivity in return for getting more than their marginal productivity when older.<sup>13</sup>

**19.** As Dr. Noll himself notes, there exists a large and well-established literature that shows the substantial lifetime benefits, pecuniary and non-pecuniary, associated with attending college and graduating from college. These findings are also supported by the more specifically applicable findings based on the detailed empirical studies of the NELS and ELS datasets reported in the *Heckman Report*, as noted earlier.

**20.** Dr. Noll is therefore highly speculative and mistakenly incomplete to propose as a viable substitute for current student-athlete/college relationships a labor market that divorces student athletics participation from the university environment, both from the student-athlete's perspective and from the perspective of interest such connections appear to generate

---

capital: A theoretical analysis." *Journal of Political Economy* 70.5, Part 2 (1962): 9-49, (p.9). He further notes, "Employees pay for general on-the-job training by receiving wages below what could be received elsewhere." (*Id.*, p.14) See also the discussion in Becker, Gary S. *Human Capital*, Third Edition, 1993, pp. 59-70.

<sup>13</sup> Becker, Gary S., and George J. Stigler. "Law enforcement, malfeasance, and compensation of enforcers." *The Journal of Legal Studies* 3 (1974): 1-18. Lazear, Edward P. "Why is there mandatory retirement?" *Journal of Political Economy* (1979): 1261-1284.

from college sports fans. For example, while post-high school professional (minor) leagues outside of the educational/university framework exist, they have not generated comparable interest and do not provide the same benefits to the athlete and the general public as university-sponsored amateur athletics. Therefore, the analogy Dr. Noll draws between professional athletics and student athletics misses much, and such an incomplete analogy does not survive careful scrutiny.

**21.** Dr. Noll's view separates the success of college sports, such as college football, from the existence of the university. Each contributes to the success of the other, but only the university is likely to be viable on its own (and in fact, many universities do function in the absence of robust intercollegiate athletic programs). For the same reason, Dr. Noll's claim that "there is simply no principled difference" between certain benefits student-athletes receive and the compensation of a professional athlete is misguided.<sup>14</sup> In order to try to demonstrate his point, Dr. Noll uses a minor league baseball team as an example.<sup>15</sup> While a minor league baseball team may generate a small following of dedicated local fans, the difference in interest generated by minor league baseball relative to college football or college basketball is vast. In addition, the minor league baseball team does not provide the many services and broad learning opportunities to students or the enthusiasm of the general community that the university system provides. It is therefore highly misleading and speculative to ignore the enormous differences between minor league professional and intercollegiate sports.

---

<sup>14</sup> *Noll Report*, p. 26.

<sup>15</sup> *Ibid.*

**22.** More generally, since Dr. Noll ignores the multiple objectives of a university, it is unclear how he can conclude that harm results from the current system relative to one in which the Plaintiffs' proposed rule changes were implemented. On p.2 of his report, Dr. Noll states, "...this collusive agreement has no reasonable business justification." But Dr. Noll does not define the "business" objectives of a university. Dr. Noll ignores the well-established literature on missions and objectives of universities, and selects only limited aspects to construct a narrow view focused on staging college football and basketball games (only Division I) and receiving higher profits to spend on coaching and facilities due to alleged wage suppression. This description of a university's actions, without consideration or reference to the mission or objectives of these institutions, is simply speculation and not backed by any empirical analysis. The university's objectives are multiple and its systems are interconnected; the university therefore trades off multiple objectives. Without defining these objectives, one cannot assess which objectives are advanced and which are harmed by the current policy.

**23.** In summary, by focusing only on a money "wage" for student-athlete services akin to that in a "spot" labor market, Dr. Noll incorrectly divorces the athletics-related financial support received by a student-athlete from her/his standing as a student at the university. Not only is the student-athletes' very participation in intercollegiate athletics contingent upon her/his participation as a student in the academic life of a university, a student-athlete would receive a different level of monetary support and non-monetary lifetime benefits in return for her/his participation in athletics outside of the university framework. Therefore, it is critical to understand the array of lifetime benefits received by student-athletes from attending college and participating in intercollegiate athletics, and that universities compete currently across the

numerous dimensions of interest and value to students. Dr. Noll's report does not establish the existence of a monopsony in the relevant framework for analyzing the student-university relationship and student benefits.

### **C. Universities Compete for Students Across Multiple Dimensions**

**24.** In order to claim that the financial benefits received by student-athletes are restricted to a level one would expect in a monopsony, Dr. Noll implicitly assumes that student-athletes incur no utility from any short-term or long-term benefits provided by the university other than the short-term monetary value of an athletic scholarship. He provides no justification for these assumed limited preferences. Student-athletes, like all students, value other aspects of the university experience that are unrelated to their role as athletes, such as available peers, composition of the student body, educational offerings, and location, among many other factors. Dr. Noll erroneously assumes that all other non-athletic aspects of the college experience are irrelevant for determining the benefit of participation in athletics.<sup>16</sup>

**25.** From the university's perspective, Dr. Noll's analysis trivializes the role of student-athletes to a single purpose: inputs to the production of athletics. All students, including student-athletes, contribute to several of the university's missions, such as its educational mission. For example, students from disadvantaged backgrounds, which I showed in the *Heckman Report* incur additional benefits from athletics, contribute to the mission of a diverse

---

<sup>16</sup> For example, Dr. Noll assumes that if  $w$  (the financial support) were to increase then  $v$  (the non-financial component) would either stay the same or increase, and it is therefore unnecessary to examine  $v$ . (Dr. Noll asserts that  $v$  "cancels out in the calculation.") *Noll Report*, p. 59. But this assumption is unlikely to hold under many scenarios, and the examination of changes in  $v$  is in fact necessary.

student body. College athletics programs impact other constituencies positively, such as prospective students, current students, faculty, alumni, the local community, etc., and also raise awareness of the university more generally.

**26.** It follows that the matching process between a school and a prospective student, athlete or not, is complex and sophisticated. These complex matching processes have been studied extensively. Universities seek to attract students of various backgrounds (such as academic aptitude, musical ability, ability to write creatively, etc.) over a multitude of dimensions, including student-body characteristics, extra-curricular offerings, job placement success, facilities, educational offerings, reputation, history, location, as well as other dimensions. Because universities participate in offering all of these dimensions to students with a variety of different talents, any economic analysis must consider how these factors beyond athletics-based educational financial support collectively influence school choice.

**D. Even Assuming for the Sake of Argument that Dr. Noll's View of Student Athletics as a Short-Term, Narrow Spot Labor Market For Student Athletic Services Were Taken as Correct, Dr. Noll's Claim that the Defendants have Operated a Monopsony Cartel in a Market for FBS Football and Division I Basketball Labor is Unsubstantiated.**

**27.** Even if one accepts for the purpose of discussion Dr. Noll's narrow view of a spot labor market for student-athlete participation in intercollegiate athletics, it does not automatically follow that Defendants are operating a monopsony cartel in that market. Dr. Noll has failed to provide a sound theoretical basis for his claims, and has not conducted any empirical analysis which might demonstrate that the defendants' behavior is indicative of a monopsony cartel. He also fails to clarify the nature of the alleged monopsony he posits. I first describe a few basic characteristics of monopsony in labor markets that are well-known and documented in



the labor economics literature.<sup>17</sup> In particular, a monopsony implies lower wages, lower employment, and lower welfare for workers than one would observe in a non-monopsony labor market. In the context of a textbook discussion, a monopsony faces an upward-sloping labor supply curve.<sup>18</sup> That is, the only way that a monopsony can attract additional workers is by paying higher wages. Dr. Noll provides no data on financial support or other payments, or the supply curve faced by universities. However, an upward-sloping supply curve, in and of itself, is *not* evidence of monopsony. A competitive firm can also face an upward-sloping supply curve in equilibrium. For example, workers may incur many types of costs, such as search costs or mobility costs, in order to switch jobs. Given the existence of such costs, a firm will have to pay a wage premium in order to attract extra workers. This phenomenon may also generate an upward-sloping supply curve for labor faced by a firm, even in a competitive labor market. It is a manifestation of transaction costs rather than monopsony.<sup>19</sup>

**28.** Because an upward-sloping supply curve alone is not sufficient in order to show that universities are acting in accordance with an alleged monopsony cartel, it would be necessary to show that the full compensation paid to student-athletes would be higher in a but-for world

---

<sup>17</sup> Robinson (1969) notes, "Just as we have price discrimination for a monopolist, so we may have price discrimination for a monopsonist. This would occur when groups of sellers can be dealt with separately, just as seller's discrimination can occur when buyers can be divided into separate markets." Robinson, Joan. *The Economics of Imperfect Competition* (2<sup>nd</sup> Edition), St. Martin's Press (p.224). Borjas, George. *Labor Economics* (7<sup>th</sup> Edition) (2015), Chapter 4 (p. 189) notes that each worker receives his or her reservation wage from a perfectly discriminating monopsonist whereas one wage is paid to all workers by a non-discriminating monopsonist.

<sup>18</sup> See for example Borjas, George. *Labor Economics* (7<sup>th</sup> Edition) (2015), Chapter 4, for a more detailed discussion of the points herein. Borjas' analysis focuses on the case of a single-input (homogenous) market.

<sup>19</sup> For example, search costs give rise to one form of an increasing labor supply curve as modeled in Burdett, Kenneth, and Dale T. Mortensen. "Equilibrium wage differentials and employer size." *Northwestern Center for Mathematical Studies* 860 (1989). Dale Mortensen was the recipient of the 2010 Nobel Memorial Prize in Economic Sciences.

in which monopsony did not exist.<sup>20</sup> Dr. Noll has submitted no reliable empirical evidence<sup>21</sup> regarding the shape of the labor supply curve or that current NCAA financial support rules result in higher profits, more deadweight loss, fewer student-athletes, or lower output (however measured) relative to a counterfactual non-monopsony setting.

**29.** Dr. Noll appears to assert that the “price” paid to student-athletes is lower than the “price” that would be observed under the Plaintiffs’ proposed rule changes. In doing so, he relies on an article by Rothschild and White, but misses important simplifying assumptions the authors make (and acknowledge), which makes his critique inapplicable to the situation at hand. Dr. Noll states: “The authors find that the competitive price for a student is the competitive output price (without the externality of attendance) minus the competitive input price (the value in attracting other students) ... Thus, contrary to the claims in the *Elzinga Report*, competition among schools, and not collusion, ensures a proper adjustment for the network externalities arising from attendance by members of a particular group of students.”<sup>22</sup> Dr. Noll neglects to state the required assumptions used by Rothschild and White in reaching the above conclusion. Namely, the equilibrium prices charged by a competitive industry of universities will satisfy the conditions for an optimal allocation if the assumptions of a competitive equilibrium are made, among other assumptions.<sup>23</sup> Rothschild and White

---

<sup>20</sup> Though as discussed above, even in a competitive setting wages may be below the wage-earner’s marginal revenue product due to factors such as search costs or mobility costs.

<sup>21</sup> See for example the *empirical* examination of labor market monopsony conducted by Matsudaira (2014) who fails to find evidence of monopsony in the market for nursing. Matsudaira, Jordan D. “Monopsony in the low-wage labor market? Evidence from minimum nurse staffing regulations.” *Review of Economics and Statistics* (2014): 92-102.

<sup>22</sup> *Noll Report*, p. 74.

<sup>23</sup> “[P]rices are treated as parameters by all buyers and sellers, entry is easy, and all buyers and sellers are fully knowledgeable about all aspects of the transaction.” Rothschild and White, “The analytics of

themselves note that their model relies on assumptions that likely do not hold in reality. For example, they state, “We implicitly assumed that students would have no difficulty in paying for the acquisition of their (valuable) human capital. Because of a well-known set of asymmetric information problems with respect to individuals’ borrowing to finance their own education, students of various types may not be able to purchase human capital in the optimal quantities or qualities.”<sup>24</sup> Rothschild and White, unlike Dr. Noll, acknowledge their abstraction and simplifying assumption that universities possess complete information about student characteristics and that students possess complete information about their own type and about the human capital benefits provided by higher education.<sup>25</sup> Dr. Noll has neglected to state in his report that it may not be appropriate to apply conclusions from the simplified model to a setting where such assumptions are violated.

**30.** In summary, the *Noll Report* fails to theoretically or empirically substantiate any claim that a monopsony cartel exists for FBS football and Division I basketball, even if one were to incorrectly subscribe to the *Noll Report’s* narrow spot labor market view of student-athletics.

### **III. Dr. Noll Ignores the Equilibrium Effects of Plaintiff’s Proposed Rule Changes, Including Adverse Effects for Some/All Class Members**

#### **A. Dr. Noll Ignores the Value Produced by University Investments Over Time which Benefit Current and Future Students and the Value that Amateur Intercollegiate Sports Has for University Constituencies and Which the Plaintiffs’ Proposed Rule Changes Threaten.**

---

the pricing of higher education and other services in which the customers are inputs.” *Journal of Political Economy* 103:3 (1995).

<sup>24</sup> *Ibid.*, pp. 583-584.

<sup>25</sup> *Ibid.*, p. 584.

**31.** The economics of identity provides a framework within which to understand the interest by students, faculty, staff, alumni, and local communities in college football and basketball, and how changes thereto may harm the value created by that interest. Amateur intercollegiate athletics provide benefits to some of the constituencies the university considers in numerous decisions related to the university’s mission and operations. The academic literature also reports evidence that current students benefit from identification with their school’s team via various measures of well-being. Thus, actions that harm student-team identification and alumni-alma mater identification (such as deviation from the principles of amateurism) may negatively impact both current and former students of institutions of higher education.

**32.** The economics of identity have been explored by a number of economists, perhaps most notably by George Akerlof (winner of the 2001 Nobel Memorial Prize in Economic Sciences) and his co-author Rachel Kranton, who explore the economics of identity.<sup>26</sup> In their model, a person’s utility depends on his or her identity and thus identity may affect choices and outcomes. For example, they propose that the fact that graduates “give to *their own* alma mater” rather than the educational institution with the highest marginal return on

---

<sup>26</sup> For example, see Akerlof, George A., & Rachel E. Kranton. 2000. “Economics and Identity,” *The Quarterly Journal of Economics* 715-53 (August) and Akerlof, George A., & Rachel E. Kranton. 2002. “Identity and Schooling: Some Lessons for the Economics of Education,” *Journal of Economic Literature* 1167-1201 (December)“

contributions may reflect identity considerations.<sup>27</sup> Thus, colleges and universities benefit from a strong identification with past, current, and potential students and faculty.

**33.** Other studies also emphasize the importance of organizational identification. For example, Ashforth and Mael (1989) argue that “(a) social identification is a perception of oneness with a group of persons; (b) social identification stems from the categorization of individuals, the distinctiveness and prestige of the group, the salience of outgroups, and the factors that traditionally are associated with group formation; and (c) social identification leads to activities that are congruent with the identity, support for institutions that embody the identity, stereotypical perceptions of self and others, and outcomes that traditionally are associated with group formation...”<sup>28</sup> McDearmon (2013) finds positive effects of identity for alumni donations.<sup>29</sup>

**34.** One set of beneficiaries of intercollegiate athletics are current students who identify with their school’s team. Wann et al. (2002) report evidence of a positive association between team identification and various measures of student social well-being, trustworthiness of others, and satisfaction and enjoyment with the university.<sup>30</sup>

**35.** In summary, changes to the amateur character of intercollegiate athletics may damage the identification of alumni with their alma maters, and may damage current students’

---

<sup>27</sup> Akerlof, George A., & Rachel E. Kranton. 2000. “Economics and Identity,” *The Quarterly Journal of Economics* 715-53 (August), at 722.

<sup>28</sup> Ashforth, Blake E., & Fred Mael. 1989. “Social Identity Theory and the Organization,” *14 Academy of Management Review* 20-39, at 20.

<sup>29</sup> “[T]hose who displayed increased alumni role identity were more likely to support the university through joining the alumni association, attending university sponsored events and charitable giving.” McDearmon, J. Travis. 2013. “Hail to Thee, Our Alma Mater: Alumni Role Identity and the Relationship to Institutional Support Behaviors,” *54 Research in Higher Education* 283-302, at 283.

<sup>30</sup> Wann, Daniel L., & Thomas N. Robinson III. 2002. “The Relationship between Sport Team Identification and Integration into and Perceptions of a University,” *6 International Sports Journal* 36-44 (Winter).

identification with their teams, resulting in harm to the social well-being of fans and impact donations. Moreover, these costs can increase over time, as the effects of previous identification capital dissipate. Thus, the ultimate impact of rule changes would occur over time, and the immediate impact (after these changes go into effect) would only capture a portion of the resulting changes.

**B. Dr. Noll Ignores The Equilibrium Effects of Plaintiffs' Proposed Rule Changes, Including Adverse Effects for Some/All Class Members, Employing Strong Unfounded Assumptions About the But-For World As the Basis for His Analysis**

**36.** A major shortcoming of the *Noll Report* is that it fails to properly analyze the equilibrium effects of Plaintiffs' proposed rule changes. In particular, Dr. Noll's but-for world assumes, contrary to basic economics, that nothing would change if the Plaintiffs' proposed rule changes were implemented. While changing these rules might make a subset of the class better off monetarily in the short-term, Dr. Noll assumes no adverse effects on student-athletes' educational and future employment outcomes due to the incentive changes associated with Plaintiffs' proposed rule changes.

**37.** One erroneous assumption underlying the reasoning employed by Dr. Noll throughout his report is that a change in the direct "compensation scheme" provided to student-athletes would not harm any subset of student-athletes under consideration in this litigation (or any other (prospective) students at the university). It is vacuously true that if the athletics-related educational support package were altered, such actions might lead to some student-athletes receiving additional funds and, if no other changes occurred, then a subset of the class may be better off *monetarily* in the short-term spot market, a narrow dimension of the student-

athletes' short-term welfare. It defies economic logic to ignore effects on other components of benefits due to Plaintiffs' proposed rule changes.

**38.** Plaintiffs' proposed rule changes would be particularly welfare-damaging if such rule changes resulted in fewer athletic scholarships in Division I football and basketball, as well as other sports, athletic scholarships that were smaller in size, or fewer need-based scholarships to other members of the university student community. In fact, it is possible that the change in rules proposed by the plaintiffs would reduce access to the university for financially disadvantaged individuals, reducing college athletics' ability to serve as a vehicle for social mobility. In the *Heckman Report*, I show that but-for participating in high school athletics, an individual is less likely to graduate high school and less likely to attend a post-secondary institution.<sup>31</sup> For many high school students, especially disadvantaged students, the prospect of an athletic scholarship serves as motivation to participate in athletics. Dr. Noll incorrectly dismisses the likely result that Plaintiffs' proposed rule changes will result in short-term monetary gain for a subset of class members at the expense of remaining class members as well as others who will no longer be able to afford a college education due to a reduction in athletic scholarships.

**39.** One example of Dr. Noll's unfounded assumptions regarding the but-for world can be found in his criticism of Prof. Elzinga's opinion that the NCAA is not a cartel. Dr. Noll states on p. 36 of his report, "Collusion on compensation for athletes increases the net revenue derived from staging games, thereby increasing the return from expenditures on facilities and on coaches who can succeed in recruiting athletes." Employing Dr. Noll's own logic (regardless of

---

<sup>31</sup> See *Heckman Report*, p. 21.

whether one agrees or disagrees), increased support for athletes would therefore decrease the net revenue from staging games, thereby decreasing the return from expenditures on facilities and on coaches who can succeed in recruiting athletes and reducing resources for all other missions of the university. In his attempt to contradict Prof. Elzinga, Dr. Noll in fact recognizes the interdependency between funds directed towards student-athlete monetary support and the budgetary decisions of the university, including student-athlete non-monetary support.

**40.** Another example of Dr. Noll's unfounded assumptions regarding the but-for world can be found in his criticism of Prof. Elzinga's view of the value of an athletic scholarship. Dr. Noll states, "Students who would not have attended college had they not been offered an athletic scholarship surely benefit from the experience, but this benefit is not relevant to calculating the economic value of the scholarship. These athletes, facing the prospect of attending college at the net cost to them of enrolling, have concluded that college is not worth that cost. Hence, the maximum benefit of an athletic scholarship is the net cost of attending college without an athletic scholarship, which is COA minus the financial aid that they otherwise would have received."<sup>32</sup> This point is predicated on two very strong assumptions: 1) that every high school student perceives all of the costs and benefits of attending college and 2) that any student who wished to attend college could do so regardless of their family's financial background. Later, Dr. Noll appears to contradict himself when he recognizes the increasing importance of family income for college attendance: "This effect is especially strong for students from low income families, where the effects of family financial hardship and the amount of financial aid in the

---

<sup>32</sup> *Noll Report*, p. 57.



form of grants are especially important in determining college attendance and persistence.”<sup>33</sup>

In making this point, Dr. Noll cites my research.<sup>34</sup> Dr. Noll’s statement on pp. 61-62 of the *Noll Report* therefore directly contradicts his opinion that the maximum value of an athletic scholarship is equal to COA minus financial aid otherwise received. That is, if an athletic scholarship determines whether one will attend college, it is clear that one must also consider the short-term and long-term benefits of attending college when assessing the value of an athletic scholarship. Dr. Noll seems to assume that high school students have perfect information when evaluating the future gains from college attendance,<sup>35</sup> and that all families (including those from disadvantaged backgrounds) face no borrowing constraints.

**41.** In his evaluation of Prof. Elzinga’s Prisoner’s Dilemma example, Dr. Noll claims the model does not “produce useful insights.” He offers three “fundamental reasons”:

- “(1) The values of the parameters of the model are assumed, rather than derived from actual experience.
- (2) The underlying theory itself is not an accurate representation of the true decision-making environment in which schools find themselves.
- (3) The economic welfare of the victims of price-fixing – the athletes – is not taken into account in the model.”<sup>36</sup>

---

<sup>33</sup> *Ibid.*, pp. 61-62.

<sup>34</sup> *Ibid.*, p. 62. See also Belley, Philippe and Lance Lochner. “The Changing Role of Family Income and Ability in Determining Educational Achievement.” *Journal of Human Capital* 1.1 (2007): 37-89. Lochner, Lance and Alexander Monge-Naranjo. “Credit Constraints in Education.” *Annual Review of Economics* (2012): 225-256. Lochner, Lance and Alexander Monge-Naranjo. “Student loans and repayment: Theory, evidence, and policy.” *Handbook of the Economics of Education* 5 (2016): 397-478. Hai, Rong, and James J. Heckman. “Inequality in human capital and endogenous credit constraints.” *Review of Economic Dynamics* 25 (2017): 4-36. The literature also finds that disadvantaged youth, even with higher test scores, are less likely to attend college.

<sup>35</sup> For example, Oreopoulos (2007) and Betts (1996) survey the literature that suggests that students do not fully perceive the returns to schooling. Oreopoulos, Philip. “Do dropouts drop out too soon? Wealth, health and happiness from compulsory schooling.” *Journal of Public Economics* 91.11-12 (2007): 2213-2229. Betts, Julian R. “What do students know about wages? Evidence from a survey of undergraduates.” *The Journal of Human Resources* 31.1 (1996): 27-56.

<sup>36</sup> *Noll Report*, p. 95.

However, Dr. Noll's entire report, including his assumption regarding the but-for world, fails to meet his own three criteria. He myopically assumes that nothing else would change other than implementing Plaintiffs' proposed rule changes, and that *all* class members would receive additional athletic-related financial support while maintaining the same level of non-monetary benefits, to include access to higher education.

**42.** Dr. Noll does not provide any analytical model or empirical evidence as to the equilibrium effect of implementing Plaintiffs' proposed rule changes. His report only vaguely considers three possible equilibria in the but-for world:

- His main scenario: Nothing else would change, and all class members would receive additional monetary support while maintaining the same level of non-monetary benefits, including class members' access to higher education.
- Dr. Noll acknowledges that it is possible nothing would change if his proposed reforms were initiated and current levels of support would remain the same.<sup>37</sup>
- Each conference would be allowed to set its own financial support-related rules.<sup>38</sup>

But, Dr. Noll does not analyze what state of equilibrium would be achieved. In fact, nothing in Dr. Noll's report can be used reliably to infer what the but-for world would be, since he failed to make an attempt (analytically or empirically) to consider how demand, supply, and the overall equilibrium would change in terms of the number of available scholarships, the average

---

<sup>37</sup> "[T]hat conference independently could adopt compensation rules that are essentially the same as the current NCAA rules as long as each conference adopts its rules unilaterally. The requested relief does not prohibit this outcome..." (*Noll Report*, p. 30)

<sup>38</sup> "For example, one possible post-injunctive system is to operate like the college athletic system during the first half of the 20<sup>th</sup> Century, when each conference had its own compensation rules." (*Noll Report*, p. 30)

support package for each athlete, and the distribution of athletically related support within and across schools.

**43.** In particular, Dr. Noll ignores the following possible equilibria:

- In the but-for world, some schools would reduce the monetary or other components of support for some of their FBS football players or Division I basketball players, holding all other terms constant. Those class members would be worse off.
- In the but-for world, some schools would deem it no longer viable/desirable to compete in Division I, thereby reducing the number of available scholarships.

As discussed in the *Heckman Report*, the reduced number of scholarships could potentially reduce the number of high-school athletes from disadvantaged backgrounds who would attend college.<sup>39</sup>

**44.** Dr. Noll's assumption that all other benefits would remain the same if Plaintiffs' proposed rule changes were implemented is also contrary to the literature on the effects of the minimum wage. In particular, Lazear and Miller (1981) note that "employers have an incentive to alter the structure of the compensation package when faced with a minimum wage constraint. An obvious example is the reduction of health or vacation benefits at the same time that money wages are increased."<sup>40</sup> Similarly, Neumark and Wascher (2001) find that

---

<sup>39</sup> Noll explains on p. 37 that: "The essence of MIT's argument was that the anticompetitive harm from giving some students less financial aid was offset by the procompetitive benefit of giving financial aid to a greater number of students." He provides no evidence or rationale as to why he assumes a similar outcome (a reduction in the number of FBS football players or Division I basketball players) might not occur in the but-for world.

<sup>40</sup> Lazear, Edward and Frederick H. Miller. "Minimum Wage Versus Minimum Compensation" in *Report of the Minimum Wage Study Commission*, Volume 5. Washington, DC: United States Government Printing Office (1981) p. 347.

“minimum wages reduce training aimed at improving skills on the current job, especially formal training.”<sup>41</sup>

**45.** Dr. Noll also does not address whether Plaintiffs’ proposed rule changes would result in differential benefits across students or assess the impact of such an outcome. It is possible that differential benefits would have an adverse effect on class members and reduce demand. In addition, increased within-team disparities may reduce the satisfaction of students who receive less support. For example, Fehr and Schmidt (1999) derive a theoretical model that examines inequality aversion, motivated by a large body of literature finding preference for fairness and equitable outcomes, including in wages.<sup>42</sup> Benefits accrued by student-athletes according to athletic ability and/or their individual contribution to school revenues (however measured) may foster intra-team, inter-team, and intra-university conflict and resentment, thereby undermining what is arguably an important mission of a university – creation of a sense of community for the mutual benefit of its members.<sup>43</sup>

**46.** Dr. Noll also argues that small changes (e.g., small payment increases) do not affect the demand for the end product of amateur intercollegiate sports by either saying that student-athletes currently are not amateurs or that fans do not care if students are paid to play. By

---

<sup>41</sup> Neumark, David, and William Wascher. "Minimum wages and training revisited." *Journal of Labor Economics* 19.3 (2001): 563-595, p. 591.

<sup>42</sup> For example, Luttmer (2005) finds that neighbors’ higher-than-own earnings decrease own self-reported happiness. Luttmer, Erzo F.P. "Neighbors as negatives: Relative earnings and well-being." *The Quarterly Journal of Economics* 120.3 (2005): 963-1002. Card et al. (2012) find empirical evidence for the adverse effect of lower-relative-to-peers pay on employees’ job satisfaction. Card, David, et al. "Inequality at work: The effect of peer salaries on job satisfaction." *The American Economic Review* 102.6 (2012): 2981-3003. Tricomi, Elizabeth, Antonio Rangel, Colin F Camerer, and John P O’Doherty. "Neural evidence for inequality-averse social preferences." *Nature* 463.7284 (2010): 1089-1091.

<sup>43</sup> The value assessed and benefits tailored to individual athletes should be distinguished from a known arrangement in which there are a fixed number of scholarships and walk-on athletes on a team.

relying on an analysis of small changes in order to forecast large-scale changes, he does not provide reliable evidence that a substantial change in the rules at issue in this litigation would produce small or insignificant changes to all other aspects of the relationship. Economists know the dangers of predicting out of sample without well-founded analysis, yet this is what Dr. Noll does in concluding harm to the classes from the current policy and only benefits from the Plaintiffs' requested changes. In contrast to the scientific approach used to test hypotheses in the wider economics literature as well as in the *Heckman Report*, Dr. Noll's approach is highly flawed and leads to conclusions that are both doubtful and unreliable.

#### **IV. Dr. Noll's Criticisms of the Empirical Results in *Heckman Report* Are Either Factually or Econometrically Incorrect**

**47.** Dr. Noll states he has "no substantial disagreement with the statistical results in the *Heckman Report*."<sup>44</sup> However, he claims that the regressions in the *Heckman Report* "suffer from some problems."<sup>45</sup> As I demonstrate, the five claims made by Dr. Noll in Footnote 110 are either factually false or econometrically incorrect.

##### *Dr. Noll's First Claim*

**48.** Dr. Noll incorrectly claims that my regressions and findings suffer from "low power" and that my data include too few FBS football players or Division I basketball players.<sup>46</sup> Yet we find numerous cases where we reject the null. Dr. Noll's "very few" characterization is vague, highly

---

<sup>44</sup> *Noll Report*, p. 55.

<sup>45</sup> *Ibid.*

<sup>46</sup> "First, both data sets include very few observations on students who are classified as FBS football players or Division I basketball players, which causes tests of the effects of participation in these sports on graduation and earnings to have low power." *Ibid.*

subjective, and unsubstantiated. Dr. Noll provides no statistical analysis of the power of my regressions. As discussed in any introductory statistics or econometrics textbook,<sup>47</sup> Dr. Noll's type of claim about low power is incorrect and refuted by the evidence in the *Heckman Report*. A claim of low power would imply that I would fail to find an effect where one, in fact, exists. However, as I documented in the *Heckman Report*, I found several statistically significant effects for participation in football and basketball college athletics on both the likelihood of graduation and on earnings for those attending FBS and Division I schools.

**49.** For example, in NELS I found that among comparable Division I male students, all else equal, college football players and college basketball players are on average statistically significantly more likely to earn a Bachelor's degree or higher than comparable non-athletes. I also found that among comparable Division I female students, all else equal, college basketball players are on average statistically significantly more likely to earn a Bachelor's degree or higher than comparable non-athletes.<sup>48</sup> Furthermore, in ELS I found that all else equal, intercollegiate athletes are statistically significantly more likely to earn a Bachelor's degree or higher than comparable non-athletes.<sup>49</sup>

**50.** In addition, analyzing NELS data, my empirical findings show that among Division I male students, all else equal, on average: a) intercollegiate athletes earn statistically significantly higher wages in their mid-20's than non-athletes and b) college football and college basketball

---

<sup>47</sup> "In hypothesis testing ... [t]he second kind of error is failing to reject  $H_0$  when it is actually false. This is called a **Type II error** ... we would then like to minimize the probability of a Type II error. Alternatively, we would like to maximize the **power of a test** against all relevant alternatives. The power of a test is just one minus the probability of a Type II error." [emphasis in the original] Wooldridge, *Introductory Econometrics, A Modern Approach*, 5<sup>th</sup> Edition, 2012, p. 779.

<sup>48</sup> See *Heckman Report*, p. 35.

<sup>49</sup> See *Heckman Report*, p. 34.

players earn statistically significantly higher wages in their mid-20's than non-athletes.<sup>50</sup> I also found in NELS that among FBS male students, all else equal, on average college football players and college basketball players earn statistically significantly higher wages in their mid-20's than non-athletes.<sup>51</sup> Every such statistically significant effect contradicts Dr. Noll's claim of low power.

**51.** Besides ignoring numerous statistically significant and important results in the *Heckman Report*, Dr. Noll's claim regarding the existence of few football and basketball college athletes in FBS and Division I schools in both data sets is factually incorrect. First, my regressions include FBS football and Division I basketball players, other athletes, and non-athletes resulting in sample sizes in the thousands (both for males and females). Second, even if one were to focus solely on football and basketball college athletes in FBS and Division I schools, there are 90 Division I male football or basketball student-athletes in NELS (of which 40 are in FBS schools) and 30 Division I female basketball student-athletes in NELS. Similarly, there are 100 Division I male football or basketball student-athletes in ELS (of which 50 are in FBS schools), and 40 Division I basketball female student-athletes in ELS.<sup>52</sup>

*Dr. Noll's Second Claim*

**52.** Dr. Noll criticizes my use of wages at age 25 (a measure contained in the last survey wave in NELS and ELS): "income is measured only at about age 25 (twelve years after a student was in the eighth grade), which is not an accurate measure of lifetime earnings, especially for

---

<sup>50</sup> See *Heckman Report*, p. 37.

<sup>51</sup> See *Heckman Report*, p. 37.

<sup>52</sup> The numbers are rounded to the nearest 10 to comply with the terms of the U.S. Department of Education license agreement.

students who attend graduate or professional schools and do not begin their careers until they are older.”<sup>53</sup> First, such measures are widely used in the economics literature (see for example, Keane and Wolpin, 1997; Chetty et al., 2011; Kline and Walters, 2016).<sup>54</sup>

**53.** Second, Dr. Noll does not claim that results in the *Heckman Report* are biased in any way due to some students attending graduate or professional schools. Further, note that the wage regressions do, in fact, include those who earn income but who were in school in their mid-20’s (and their schooling status is controlled for), so Dr. Noll’s concern would only apply to some smaller subset of students still in school in their mid-20s (with no earnings), not all of them.

**54.** Third, Dr. Noll ignores the fact that I included a very rich set of controls, such as family background (including family income), cognitive ability, and non-cognitive ability.<sup>55</sup> These controls greatly mitigate any potential concern resulting from some sample members attending school and having no wage earnings. For example, if individuals with higher cognitive ability are more likely to attend graduate school, then my regression properly accounts for that, as I control for cognitive ability. Similarly, I control for many other factors that may affect the likelihood of attending graduate school, such as non-cognitive ability, parents’ income, and parents’ education.

---

<sup>53</sup> See *Noll Report*, p. 55.

<sup>54</sup> Keane, Michael P., and Kenneth I. Wolpin. "The career decisions of young men." *Journal of Political Economy* 105.3 (1997): 473-522. Chetty, Raj, et al. "How does your kindergarten classroom affect your earnings? Evidence from Project STAR." *The Quarterly Journal of Economics* 126.4 (2011): 1593-1660. Kline, Patrick, and Christopher R. Walters. "Evaluating public programs with close substitutes: The case of Head Start." *The Quarterly Journal of Economics* 131.4 (2016): 1795-1848.

<sup>55</sup> See discussion in *Heckman Report*, ¶¶ 40-44, on the importance of properly controlling for student ability and family background.



55. Fourth, the results in the *Heckman Report* indicate that college varsity athletes are *more* likely to obtain a Graduate degree (as well as a Bachelor's degree). This would suggest that lifetime earnings for college athletes, all else equal, would be higher.<sup>56</sup> For example, my findings of a positive effect of athletic participation on earnings, to the extent that they are driven by higher educational attainment, would suggest that the wage effects in mid-20's are likely conservative relative to life-time earnings.<sup>57</sup>

*Dr. Noll's Third Claim*

56. Dr. Noll states that "Professor Heckman's results are derived from regressions that compare students who were athletes in college to all individuals in the same age cohort, rather than to college students who were not athletes."<sup>58</sup> The claim is factually incorrect. First, *every* regression examining college completion is conditional on attending a post-secondary institution.<sup>59</sup> Second, the *Heckman Report* contains several specifications and results where I examined mid-20's wages of Division I athletes vs. Division I non-athletes (and FBS athletes vs. FBS non-athletes). These regressions provide a comparison of wages among college students.

---

<sup>56</sup> Of the 8 multinomial logit specifications in the *Heckman Report* that examine the likelihood of obtaining a Bachelor's degree, 7 have a positive and statistically significant effect. Of the 8 multinomial logit specifications that examine the likelihood of obtaining a Graduate degree, 2 have a positive and statistically significant effect for college athletics (and the coefficients are positive in 6 of the 8 cases). *Heckman Report*, Tables N3.1D, N3.1E, N3.2D, N3.2E, E3.1D, E3.1E, E3.2D, and E3.2E.

<sup>57</sup> The average wage gap between those with a college degree and high-school graduates increases with experience, especially during the first decade, suggesting mid-20's wages are a conservative measure of the life-time returns to a college education. See for example, the wage-experience earnings profiles in Murphy, Kevin M., and Finis Welch. "The structure of wages." *The Quarterly Journal of Economics* 107.1 (1992): 285-326.

<sup>58</sup> See *Noll Report*, p. 55.

<sup>59</sup> See *Heckman Report*, Tables N3.1A, N3.1B, N3.1C, N3.1D, N3.1E, N3.2A, N3.2B, N3.2C, N3.2D, N3.2E, N3.3A, N3.3B, N3.3C, N3.3D, N3.4A, N3.4B, N3.4C, N3.4D, E3.1A, E3.1B, E3.1C, E3.1D, E3.1E, E3.2A, E3.2B, E3.2C, E3.2D, E3.2E, E3.3A, E3.3B, E3.3C, E3.3D, E3.4A, E3.4B, E3.4C, E3.4D.

For example, Dr. Noll ignored the following results in the *Heckman Report*, Tables N4.1C, Column (2); N4.1C, Column (3); N4.1C, Column (5); N4.1C, Column (6); N4.2C, Column (2); N4.2C, Column (3); N4.2C, Column (5); N4.2C, Column (6); E4.1C, Column (2); E4.1C, Column (3); E4.1C, Column (5); E4.1C, Column (6); E4.2C, Column (2); E4.2C, Column (3); E4.2C, Column (5); E4.2C, Column (6).

**57.** As explained above, Dr. Noll ignored the many regressions that compare college athletes to non-athletes attending college. As an additional robustness check, I re-examined all of the wage regressions in *Heckman Report* by further restricting the sample to those who attended a 4-year not-for-profit post-secondary education institution by 1994 (NELS) or 2006 (ELS).<sup>60</sup> Tables 5 and 7 of the *Heckman Report* summarize the effects of college athletics in general and college basketball/football participation in particular on mid-20's wages. Referring to these results, I found positive and significant effects in 8 cases in the *Heckman Report* (and 7 cases when conditioning on attending a 4-year not-for-profit post-secondary institutions), insignificant effects in 16 cases in the *Heckman Report* (and 17 cases when conditioning on attending a 4-year not-for-profit post-secondary institution), and I never find negative and significant effects for athletics in these tables, regardless of whether the regressions condition on attending a 4-year not-for-profit institution.

#### *Dr. Noll's Fourth Claim*

**58.** Dr. Noll criticizes the athletic classification used in the *Heckman Report*: "the data do not indicate which sport an athlete played in college, which means that Professor Heckman's results only imperfectly apply to members of the classes in this litigation." Dr. Noll fails to

---

<sup>60</sup> The full set of results are reported in Appendix C1.

opine on whether this “imperfect” classification would bias the results, and if so, in which direction.<sup>61</sup>

**59.** Furthermore, Dr. Noll’s description of the classification is misleading. Dr. Noll states, “Professor Heckman’s procedure is to classify an athlete as a college basketball or football player if the student played that sport in high school. As Professor Heckman notes, many athletes play several sports in high school but concentrate on one sport in college. Thus, Professor Heckman classifies a college student as a basketball player if the player participated in basketball, track and soccer in high school.”<sup>62</sup> It is hypothetically possible that there exist sample members that participated in basketball, track and soccer in high school who were classified as basketball players in college. However, as implied by Dr. Noll, a college athlete is classified as a college basketball or football player if the student played that sport in high school (independent of participation in any specific additional sport such as track or soccer). Moreover, there is no way that Dr. Noll (or I) could identify a basketball player who also participated in track because there does not exist a sport variable in the NELS or ELS data that definitively indicates whether the sample member participated in track.<sup>63</sup>

**60.** Dr. Noll chose an example of a hypothetical athlete playing three sports. However, in the NELS and ELS data I used, among male college athletes who played basketball or football in high school, most played only football or basketball (or both) or up to one additional non-

---

<sup>61</sup> It is a well-known fact that in the case of “classical errors-in-variables”, if a variable is measured with “random” error, then the effect is biased downward. In that case, my findings of positive effects of participation in athletics are underestimating the true effect and are, in fact, conservative. See for example, Wooldridge, *Introductory Econometrics, A Modern Approach*, 5<sup>th</sup> Edition, 2012, pp. 320-322.

<sup>62</sup> See *Noll Report*, p. 55.

<sup>63</sup> There does exist a variable in NELS and ELS that identifies whether the sample member participated in an “individual sport” in high school, of which track is only one of several options.

football/basketball sport in high school. Similarly, among female college athletes who played basketball in high school, about half played only basketball or up to one additional non-basketball sport in high school.

**61.** Though, as I explained in the *Heckman Report*, my classification is the most appropriate given the nature of the NELS and ELS surveys, I further investigated the robustness of the results in the *Heckman Report* using an alternative specification.<sup>64</sup> I designated as college football or basketball players those who played *only* varsity football or basketball in high school.<sup>65</sup> The results are similar qualitatively and quantitatively, providing further support to the findings and the conclusions in the *Heckman Report*.<sup>66</sup>

---

<sup>64</sup> The full set of results are reported in Appendix C2.

<sup>65</sup> Here, as in the *Heckman Report*, I define a college varsity basketball/football player in NELS as a sample member who participated in varsity intercollegiate athletics at the longest PSE institution (by 1994), the longest PSE institution s/he attended was a 4-year not for profit institution, and the sample member is classified as a High School Varsity Basketball/Football Athlete. The alternative definition in NELS relates to the way in which I define a High School Varsity Basketball/Football Athlete (which, in turn, influences the classification of college varsity basketball/football players). That is, for males, I define a High School Varsity Basketball/Football Athlete as a sample member who in their sophomore year participated in junior varsity or varsity athletics or was a (co-) captain in *only* basketball, *only* football, or *only* basketball and football. For females in NELS, I define a High School Varsity Basketball/Football Athlete as a sample member who in their sophomore year participated in junior varsity or varsity athletics or was a (co-) captain in basketball *only*. Similarly, as in the *Heckman Report*, I define a college varsity basketball/football player in ELS as a sample member who participated in varsity or intercollegiate athletics at the first attended PSE institution (by 2006), the first attended PSE institution s/he attended was a 4-year not for profit institution, and the sample member is classified as a High School Varsity Basketball/Football Athlete. The alternative definition in ELS relates to the way in which I define a High School Varsity Basketball/Football Athlete (which, in turn, influences the classification of college varsity basketball/football players). That is, for males, I define a High School Varsity Basketball/Football Athlete as a sample member who in their sophomore year participated in junior varsity or varsity athletics or was a varsity athletics captain in *only* basketball, *only* football, or *only* basketball and football. For females in ELS, I define a High School Varsity Basketball/Football Athlete as a sample member who in their sophomore year participated in junior varsity or varsity athletics or was a varsity athletics captain in basketball *only*.

<sup>66</sup> For example, in the 7 regression summary tables in the *Heckman Report* (Tables 1-7), across the 44 effects of football and basketball athletics, in more than half of the cases there was no change in the statistical significance of the effect, in about a third of the cases a positive and statistically significant

*Dr. Noll's Fifth Claim*

**62.** The last claim by Dr. Noll is regarding the “explanatory power” of the results in the *Heckman Report*: “Fifth, the explanatory power of Professor Heckman’s regressions is generally quite low.” As in his other claims, Dr. Noll is being vague and imprecise in his claim. I am therefore assuming that he is referring to the R-squared measures of the regressions. From a statistical standpoint, “Quite low” is, of course, not an accepted quantitative measure.

**63.** As a matter of basic textbook econometrics, Dr. Noll is misguided to focus on the R-squared measure. This is well recognized in empirical economics and discussed in undergraduate econometrics textbooks:

“The adjusted R squared is useful because it quantifies the extent to which the regressors account for, or explain, the variation in the dependent variable. Nevertheless, heavy reliance on the adjusted R squared (or R squared) can be a trap. In applications, ‘maximize the adjusted R squared’ is rarely the answer to any economically or statistically meaningful question.” (Stock and Watson, *Introduction to Econometrics*, Third Edition, 2015, p. 198).

“...choosing a set of explanatory variables based on the size of the R-squared can lead to nonsensical models...Nothing about the classical linear model assumptions requires that R-squared be above any particular value.” (Wooldridge, *Introductory Econometrics, A Modern Approach*, 5<sup>th</sup> Edition, 2012, pp. 200-201).

“Nothing in the [Classical Regression] requires that  $R^2$  be high. Hence a high  $R^2$  is not evidence in favor of the model, and a low  $R^2$  is not evidence against it ... In fact the most important thing about  $R^2$  is that it is not important in the [Classical Regression] model.” (Goldberger, *A Course In Econometrics*, 1991, p. 177).


**64.** Not only is Dr. Noll’s focus on the R-squared measure misguided, I note that the R-squared measures in the *Heckman Report* regressions are in line with those commonly reported

---

effect is no longer statistically significant. In 14% of cases, an effect became positive and statistically significant, and in none of the cases, did an effect become negative and statistically significant.

in top-tier journals of applied microeconomics. Across the regression specifications in the *Heckman Report*, Appendix E, the adjusted R-squared for the NELS regressions ranges from 0.109 to 0.322 (with a median of 0.174). The adjusted R-squared for the ELS regressions ranges from 0.075 to 0.325 (with a median of 0.146). For the wage regressions, the adjusted R-squared ranges from 0.200 to 0.298 in NELS, and 0.178 to 0.217 in ELS.

Signed this 21<sup>st</sup> day of June 2017.



James J. Heckman

# Appendix A



**James Joseph Heckman**  
**Department of Economics**  
**University of Chicago**  
**1126 East 59th Street**  
**Chicago, Illinois 60637**  
**Telephone: (773) 702-0634**  
**Fax: (773) 702-8490**  
**Email: [jjh@uchicago.edu](mailto:jjh@uchicago.edu)**

## **Personal**

**Date of Birth:** April 19, 1944

**Place of Birth:** Chicago, Illinois

## **Education**

B.A. 1965 (Math) Colorado College (summa cum laude)

M.A. 1968 (Econ) Princeton University

Ph.D. 1971 (Econ) Princeton University

## **Dissertation**

“Three Essays on Household Labor Supply and the Demand for Market Goods.”

**Sponsors:** S. Black, H. Kelejian, A. Rees

## **Graduate and Undergraduate Academic Honors**

Phi Beta Kappa

Woodrow Wilson Fellow

NDEA Fellow

NIH Fellow

Harold Willis Dodds Fellow

## **Post-Graduate Honors**

### **Honorary Degrees and Professorships**

Doctor Honoris Causa, Vienna University of Economics and Business, Vienna, Austria. January, 2017.

Doctor of Social Sciences Honoris Causa, Lignan University, Hong Kong, China. November, 2015.

Honorary Doctorate of Science (Economics), University College London. September, 2013.

Doctor Honoris Causis, Pontifical University, Santiago, Chile. August, 2009.

Doctor Honoris Causis, University of Montréal. May 2004.

Doctor Honoris Causis, Bard College, May 2004.  
Doctor Honoris Causis, UAEM, Mexico. January 2003.  
Doctor Honoris Causis, University of Chile, Fall 2002.  
Honorary Doctor of Laws, Colorado College, 2001.  
Honorary Professor, Jinan University, Guangzhou, China, June, 2014.  
Honorary Professor, Renmin University, P. R. China, June, 2010.  
Honorary Professor, Beijing Normal University, P. R. China, June, 2010.  
Honorary Professor, Harbin Institute of Technology, P. R. China, October, 2007.  
Honorary Professor, Wuhan University, Wuhan, China, 2003.  
Honorary Professor, Huazhong University of Science and Technology, Wuhan, China, 2001.  
Honorary Professor, University of Tucuman, October, 1998.  
Honorary Member, Latin and Caribbean Economic Association, 1999.

#### **Awards and Honors**

Bank of Sweden Prize in Economic Sciences in Honor of the Memory of Alfred Nobel, 2000.  
John Bates Clark Medal, American Economic Association, 1983.  
Distinguished Fellow of the American Economic Association. April, 2017  
Dan David Prize for Combating Poverty, Tel Aviv University. May, 2016.  
James Madison Medal for Distinguished Graduate Alumni, Princeton University. February, 2016.  
Frisch Medal, Econometric Society, 2014. Awarded every two years for an outstanding applied article (empirical or theoretical) published in *Econometrica* during the past five years.  
Spirit of Erikson Award, Erikson Institute, 2014. Awarded for significant contributions to the education and development of children.  
Distinguished Contributions to Public Policy for Children Award, Society for Research in Child Development, 2009.  
Gold Medal of the President of the Italian Republic, Awarded by the International Scientific Committee of the Pio Manzù Centre, 2008.  
Theodore W. Schultz Award, American Agricultural Economics Association, January 2007.  
Dennis J. Aigner Award for Applied Econometrics, *Journal of Econometrics*, 2007.  
Sun Yefang Economic Science Award, 2007.  
Ulysses Medal, University College Dublin, 2006.  
Jacob Mincer Award for Lifetime Achievement, Society of Labor Economics, 2005.  
Dennis J. Aigner Award for Applied Econometrics, *Journal of Econometrics*, 2005.

Medal of Excellence, Centres of Excellence for Children's Well-Being, Montreal University, "Exceptional Contributions to Childhood Development", May 2004.

Statistician of the Year, Chicago Chapter of the American Statistical Association, 2002.

First Annual Louis T. Benezet Distinguished Alumnus Award, Colorado College, 1985.

Elevated to Distinguished Service Professorship, University of Chicago, 1995–.

A. Whitney Griswold Professor of Economics, Yale University, 1988–1990.

Henry Schultz Professor of Economics, University of Chicago, 1985–.

Irving Fisher Professor, Yale University, Fall 1984.

### **Fellowships (Year Appointed)**

Fellow, Econometric Society, 1980

Fellow, American Academy of Arts and Sciences, 1985

Research Professor, American Bar Foundation, 1991

Member, National Academy of Sciences, 1992

Fellow, American Statistical Association, 2001

Fellow, *Journal of Econometrics*, 2005

Fellow, Society of Labor Economics, 2004

Resident Member, American Philosophical Society, 2008

Fellow, International Statistical Institute, 2008

Fellow, American Association for the Advancement of Science, 2009

Lifetime Member, Irish Economic Association, 2009

Member, National Academy of Education, 2010

Honorary Academician, Academia Sinica, Republic of China/Taiwan, July, 2010

Corresponding Member, Brazilian Academy of Sciences, 2011

Fellow, The Society for Economic Measurement, 2013

Kenneth Boulding Fellow, American Academy of Political and Social Science. May, 2016.

Charter Fellow, Institute for Nonlinear Dynamical Inference (INDI), Moscow. February, 2017.

## **Post Graduate Support for Released Time**

John Simon Guggenheim Memorial Fellowship, 1978–1979.

Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford University, 1978–1979.

Social Science Research Council Training Fellow, 1977–78.

Harry Scherman Fellow, National Bureau of Economic Research, 1972–1973.

## **Professional Experience**

### **University of Chicago**

Henry Schultz Distinguished Service Professor, 1995–

Henry Schultz Professor, 1985–1995

Professor of Economics, 1977–

Associate Professor, 1973–1977 (tenured, 1974)

Professor, Irving B. Harris School of Public Policy, 2011–

Affiliated Faculty, Irving B. Harris School of Public Policy, 1990–2011

Director, Center for Social Program Evaluation, Harris School of Public Policy 1991–2011

Director, Economics Research Center, University of Chicago, 1998–2006

Director, Center for the Study of Childhood Development, Harris School of Public Policy, University of Chicago, 2009–2014

Professor of Law, University of Chicago School of Law, 2011–

Director, Center for the Economics of Human Development, University of Chicago, 2014–

### **American Bar Foundation**

Research Fellow, 1991–

### **Institute for Fiscal Studies**

International Research Fellow, 2014–

### **University College Dublin**

Professor of Science and Society, 2005–2014

### **University College London**

Distinguished Chair of Microeconometrics, 2004–2008

### **University of Southern California**

USC Presidential Scholar-in-Residence, Leonard D. Schaeffer Center for Health Policy and Economics, 2015–

**Yale University**

Alfred Cowles Distinguished Visiting Professor, Cowles Foundation, 2008–2011

A. Whitney Griswold Professor of Economics, 1988–1990

Professor of Statistics, 1990

Yale Law School Lecturer, 1989–1990

**National Bureau of Economic Research**

Associate, 1971–1985, 1987–  
Research Fellow, 1972–1973

**Peking University**

Changjiang River Scholar Professor, 2004–2008

**National Opinion Research Center**

Research Associate, 1979

**RAND Corporation**

Consultant 1975–1976

**Columbia University**

Associate Professor 1973–1974

Assistant Professor, 1971–1973

Lecturer, 1970–1971

**New York University**

Adjunct Assistant Professor, 1972

**Council of Economic Advisors**

Junior Economic Advisor, 1967

**Previous Positions**

Martin-Marietta Aerospace Systems Engineer, 1965

### **Other Professional Activities**

1. Director, Human Capital and Economic Opportunity Global Working Group, with Robert Dugger and Steven Durlauf (Sponsored by the Institute for New Economic Thinking), 2011–
2. Member, Research Council, Becker-Friedman Institute for Research in Economics, 2011–2017
3. Member, Faculty Steering Committee for the University of Chicago Beijing Center, 2013–2016
4. Member, Advisory Committee of the China Institute of Income Distribution Studies, Beijing Normal University, 2011–
5. Senior Advisor, China Development Research Foundation, October, 2012–
6. Past President, The Econometric Society, 2014 (Cycle: Second Vice-President, 2010-2011; First Vice-President, 2011-2012; President, 2013; Past President, 2014)
7. Member, Executive Committee, The Econometric Society, 2010–2014
8. Member, 1997 National Longitudinal Survey of Youth Advisory Panel, NORC, 2008–
9. *IZA Journal of Labor Economics*, Associate Editor, 2012–
10. *Journal of Political Economy*, Co-Editor, 2011–
11. *Annual Review in Economics*, Co-Editor, 2007–2011
12. Member, International Statistical Institute, 2007—
13. Advisory Board, *Journal of Applied Econometrics*, 2007–2013
14. President, Western Economics Association 2003 (Cycle: VP (2003–2004), President Elect (2004–2005), President (2005–2006))
15. Council, Econometric Society, 2000–2006
16. President, Midwest Economics Association, 1998.
17. *Econometrics Reviews*, Co-Editor; Associate Editor, 1987–
18. *Handbook of Econometrics* Vol. 5, Co-Editor with Ed Leamer
19. *Handbook of Econometrics* Vol. 6A, Co-Editor with Ed Leamer
20. *Handbook of Econometrics* Vol. 6B, Co-Editor with Ed Leamer
21. Vice President, American Economic Association, 2010
22. American Economics Association, Executive Committee Member, 2000–2003

23. Science, Technology and Economic Policy Board, National Research Council, Member 2000–
24. *Evaluation Review*, Associate Editor, 1991–1996
25. *Journal of Economic Perspectives*, Associate Editor, 1989–1996
26. *Review of Economics and Statistics*, Associate Editor, 1994–2002
27. Member, Advisory Board and Dean’s Search Committee, School of Public Policy, University of Chicago, 1985–1988
28. Member, National Academy of Sciences Panel on the Status of Black Americans, 1985–1988
29. *Journal of Labor Economics*, Editorial Board, 1983–2008
30. Member, National Academy of Sciences Panel On Statistical Assessments as Evidence in the Courts, 1982–1985
31. *Review of Economic Studies*, Associate Editor, 1982–1985
32. *Journal of Political Economy*, Co-Editor, 1981–1987
33. Member, Board of Overseers, Michigan Panel Survey of Income Dynamics, 1981–1984
34. *Journal of Econometrics*, Editor of the Special Issue on Panel Data, 1981
35. Member, Advisory Board Chicago Urban League, 1980–1987
36. Academic Press Editor of Labor Economics Series, 1980–1984
37. *Journal of Econometrics*, Associate Editor, 1977–1983
38. National Science Foundation Evaluation Panel in Economics - Member, 1977–1979
39. London School of Economics, Visitor, Spring 1977, Center for Research on the Economics of Education
40. University of Wisconsin Institute for Research on Poverty, Visiting Professor, Fall 1977
41. *Annals of Economic and Social Measurement*, Editor of Volume 5, number 4, special issue on Discrete, Qualitative and Limited Dependent Variables, 1976
42. Social Science Council Research Committee on Research Methods for Longitudinal Data, 1976–1979, 1981–1982

## Major Invited Lectures

1. “The Benefits of Basic Research: Long-Term Evidence on Policies that Promote Families and Children,” Aspen Ideas Festival, Aspen, CO. June 22, 2017.
2. “The Developmental Origins of Health and Well-Being,” American Thoracic Society International Conference, Washington, DC. May 20, 2017.
3. “The Benefits of Basic Research: Long-Term Evidence on Policies that Promote Families and Children,” Aspen Forum on Children and Families, Washington, DC. January 25, 2017.
4. “Human Development is Economic Development,” World Economic Forum Annual Meeting, Davos, Switzerland. January 17, 2017.
5. “Publishing and Promotion in Economics: The Curse of the Top Five,” American Economic Association Meeting, Chicago, IL. January 6, 2017.
6. “Fiscal Policies for Human Development,” Interamerican Development Bank Workshop, Interamerican Development Bank, Washington, DC. November 20, 2016.
7. “Microdata for Denmark and USA looking at Education and Labor in a Nordic Welfare State,” Transatlantic Forum, Norwegian Ministry of Education and Research. Chicago, IL. October 25, 2016.
8. “The Life-Cycle Benefits of an Influential Early Childhood Program,” Jinan University. Guangzhou, China. October 9th, 2016.
9. “Early Childhood Education,” Boys and Girls Clubs’ Association, 80th Anniversary Scientific Symposium, The Chinese University of Hong Kong, October 7, 2016.
10. “Life-Relevant Skills,” The Chinese University of Hong Kong, October 6, 2016.
11. “Creating and Measuring Capabilities,” and “The Developmental Origins of Health: Cognition, Personality, and Education,” Chinese University Public Lecture, The Chinese University of Hong Kong. October 6, 2016.
12. “The Life Cycle Benefits of an Influential Early Childhood Intervention,” Russell Sage Foundation Seminar, New York City, NY. September 23, 2016.
13. “Promoting Skills to Address Inequality and Social Mobility,” 71st Annual Meeting of the Midwestern Legislative Conference, Milwaukee, WI. July 19, 2016
14. “Intergenerational Mobility: Sources and Mechanisms A Comparison of the U.S. and Scandinavia,” Ce2 Workshop & Warsaw International Economic Meeting, Warsaw, Poland, June 27, 2016.
15. “The Economics and Econometrics of Social Mobility and Human Development,” CEMMAP Master Class, Centre for Microdata Methods and Practice, University College London. June 23-26, 2016.



16. "Creating and Measuring Capabilities," Dan David Prize Award Ceremony, Symposium on Combatting Poverty, Tel Aviv University, Tel Aviv, Israel. May 22, 2016.
17. "Creating and Measuring Capabilities," Guangzhou Public Lecture, Jinan University, Guangzhou, China. March 14, 2016.
18. "Creating and Measuring Capabilities," Nanqiang Award Public Lecture, Xiamen University, Xiamen, China. March 11, 2016.
19. "Innovation in the Early Years: Why Early Childhood Investments Make Sense," (with J.B. Pritzker), Silicon Valley Community Foundation Meeting, Rancho Santa Fe, CA. February 25, 2016.
20. "Inequality, Social Mobility, and Public Policy," James Madison Medalist Award Ceremony, Princeton University, Princeton, NJ. February 20, 2016.
21. "Microeconomics of Life Course Inequality: A Tale of Two Tails and the Middle Too," ASSA Continuing Education Program, AEA Annual Meeting. San Francisco, CA. January 5-7, 2016.
22. "Human Development is Economic Development," Dinner with Congressman Richard Hanna, Washington, DC. November 30, 2015.
23. "The Causal Effects of Education on Earnings and Health," Workshop on "Migration, Human Capital and Child/Youth Development," Institute for Advanced Research, Shanghai University of Finance and Economics. November 19, 2015.
24. "Creating Capabilities," Hong Kong University of Science and Technology, Hong Kong, November 17, 2015.
25. "Social Mobility and Inequality," Henry George Lecture, St. John's University, Peter J. Tobin College of Business. November 9, 2015.
26. "The Non-Market Benefits of Abilities and Education," The Life and Work of Gary Becker: A Conference Dedicated to His Research on Human Capital, Becker Friedman Institute, Chicago, IL. October 16, 2015.
27. "Using Behavior to Infer Skills," Conference on Measuring and Assessing Skills, Session II: Measuring Skills from Real World Behavior. Chicago, IL. October 1, 2015.
28. "Creating Flourishing Lives: The Dynamics of Capability Formation," Amartya Sen Lecture, Human Development and Capability Association Annual Conference, Washington, DC, September 11, 2015.
29. "How Economics Guides the Interpretation of Data," 11th World Congress of the Econometric Society, Montreal, August 18, 2015.
30. "The Rate of Return to the Carolina Abecedarian Program and A New Cost-Benefit and Rate of Return Analysis for the Perry Preschool Program," International Congress: Invest Early: Contributions to the Zero-Based Budget, Mexico City, July 13, 2015.

31. Panelist, "Setting the Stage," World Education Forum 2015, Incheon, Republic of Korea, May 19, 2015.
32. "Fostering and Measuring Skills: Interventions that Improve Character and Cognition," Spencer Foundation and OECD Foundations Forum on Social and Emotional Skills. Chicago, IL, May 12, 2015.
33. "Going Forward Wisely," Education Writers Association National Seminar, Chicago, IL, April 21, 2015.
34. "Creating Capabilities," Growing Up Happy and Healthy: Scientific Findings: A Symposium, Hong Kong Early Childhood Research Foundation, Hong Kong, Peoples Republic of China, March 30, 2015.
35. "The Market and Nonmarket Returns to Education," Sandmo Lecture on Public Policy, Bergen, Norway. January 13, 2015.
36. "Going Forward Wisely," White House Summit on Early Childhood Education, The White House, Washington, DC. December 10, 2014.
37. "Early Education Programs in the US: Background and Evaluations," Means-Tested Transfer Programs, NBER, Cambridge, MA. December 6, 2014.
38. "Identifying and Estimating the Causal Effects of Education: A Synthesis of Structural and Treatment Effect Approaches," Econometrics Conference in Honor of Dr. Maasoumi, Emory University, Atlanta, VA. November 15, 2014.
39. "Keynote: The Impact of Gary Becker's Work," A Celebration of the Life and Work of Gary S. Becker, University of Chicago, Chicago, IL. October 31, 2014.
40. "Predistribution: A Strategy for Promoting Flourishing Lives," Your Light Will Rise in the Darkness: Responding to the Cry of the Poor, Notre Dame, IN. October 30, 2014.
41. "Creating Capabilities," Research Institute of Economy, Trade & Industry (RIETI), Tokyo, Japan. October 8, 2014.
42. "The Market and Nonmarket Returns to Schooling," Conference on Evidence on Schooling and Wellbeing, Aarhus University, Aarhus, Denmark. August 29, 2014
43. "The Market and Nonmarket Effects of Schooling," China Meeting of Econometric Society, Xiamen University, China. June 25, 2014.
44. "Causal Models, Structural Equations, and Identification: Stratification and Instrumental Variables," Asia Meeting of the Econometric Society, Fuzukawa Lecture, Taipei, Taiwan. June 22, 2014.
45. "Creating Flourishing Lives," University of Chicago New Delhi Center Opening, New Delhi, India. March 29, 2014.

46. "Fostering and Measuring Skills: Interventions that Improve Character and Cognition," Organisation of Economic Co-operation and Development, Meeting of OECD Education Ministers, São Paulo, Brazil. March 24, 2014.
47. "Investing in Education: A Conversation with an Economist and an Educator," First meeting of the Scientific Committee of the Reggio Emilia Foundation, Reggio Emilia, Italy. February 21, 2014.
48. "The Economics and the Econometrics of Human Development," Econometric Society Presidential Address, Allied Social Sciences Association Meetings, Philadelphia, PA. January 2, 2014.
49. "The Economics and Econometrics of Human Development," Latin American and Caribbean Economic Association Meeting and Latin American Meeting of the Econometric Society, El Colegio de México, Mexico City. November 1, 2013.
50. "The Economic Case for Investing in Young Children," National Business Leader Summit on Early Childhood Investment, Atlanta, GA. September 22, 2013
51. "The Economics and Econometrics of Human Development," Presidential Address, European Meeting of the Econometric Society, Gothenburg, Sweden. August 27, 2013
52. "A Life Cycle Strategy for Promoting Capabilities," Henderson County Community Early Childhood Investment Luncheon, Henderson, KY. July 23, 2013.
53. "The Economics and Econometrics of Human Development," Presidential Lecture, Econometric Society, Beijing, China. June 14, 2013.
54. "Causal Analysis After Haavelmo," Session: History of Econometrics and the Econometric Society, European Meeting of the Econometric Society, Gothenburg, Sweden. August 28, 2013.
55. "Investing in Early Childhood: Developing Skills for a Better Future," Deans International Council, "Public Policy in Context: Domestic and Global," Gleacher Center. May 9, 2013
56. "Investing in Early Childhood: Developing Skills for a Better Future," Education Writers of America National Seminar. "Creativity Counts: Innovation in Education and the Media," Palo Alto, CA. May 3, 2013
57. "The Economics of Inequality and Human Development," ABF Research Seminar, Chicago IL. May 1, 2013
58. Video Presentation prepared for the Conference of Legislators for Hemispheric Latin America, Brasilia, Brazil. April 18, 2013
59. i3 Webinar with Secretaries Duncan and Sebelius on Early Learning. April 16, 2013
60. "Economic Growth and Inequality in China," INET Annual Conference, Hong Kong. April 6, 2013

61. "A Framework for Analyzing Human Development Over The Life Cycle," Workshop on Early Childhood Development, University of Zurich, March 22, 2013
62. "The Skills Problem," Nebraska Chamber of Commerce and Industry 2013 Legislative Caucus and Annual Meeting, Lincoln, NE. February 7, 2013
63. "Creating and Measuring Capabilities," U.S. Government Action Plan on Children in Adversity, The White House, December 19, 2012.
64. "Noncognitive Skills and Socioemotional Learning," Research Symposium on Learning, Brookings Institution Center for Universal Education, Washington DC. December 6, 2012
65. Eunice Kennedy Shriver National Institute of Child Health and Human Development, "A Scientific Colloquium in Celebration of the Institutes 50th Anniversary 1962 2012: Research For A Lifetime," Masur Auditorium, NIH Bethesda Campus, Bethesda, MD. December 5, 2012
66. "Causal Analysis After Haavelmo: Definitions and a Unified Analysis of Identification of Causal Models," Keynote Address, European Seminar on Bayesian Econometrics, Vienna University of Economics and Business, Vienna, Austria. November 1-2, 2012
67. "The Skills Problem," Keynote Address, 2012 Kentucky Economic Association, Georgetown College, Georgetown KY. October 26, 2012
68. "The Skills Problem," Convocation, Berea College, Berea, KY. October 25, 2012
69. "The Skills Problem," Keynote Address, The Governors Office of Early Childhood Kentucky Chamber of Commerce and Prichard Committees Business Leaders for a Strong Start, Louisville, KY. October 24, 2012
70. "Creating and Measuring Capabilities," Keynote Lecture, The Third International Conference on Poverty Alleviation and Child Development Child Development and Research Forum, Beijing, China, October 18, 2012
71. "Structural Estimation of Behavioral Models: A Conference in Honor of Kenneth I. Wolpin," University of Pennsylvania, University Park, PA. September 21-22, 2012
72. "Hard Evidence on Soft Skills," Keynote Address, 2012 Chinese Economists Society Annual Conference, Henan University, Kaifeng, China. June 24, 2012
73. "The Skills Problem," Lumen Christi Institutes Fourth Annual Conference on Economics and Catholic Social Thought, "Toward a Moral Economy", Chicago, IL. June 1, 2012
74. "Hard Evidence on Soft Skills," Robert (Bob) J. Lampman Memorial Lecture, Institute for Research on Poverty (IRP) at the University of Wisconsin-Madison, Madison, WI. May 16, 2012.
75. "Hard Evidence on Soft Skills," Frank Knight Lecture, Cornell University, Ithaca, NY. April 26, 2012.

76. "A Framework for Analyzing Human Development over the Life Cycle and across Generations," Presented at the TrygFonden symposium "Improving the Well-Being of Children and Youth," The Carlsberg Academy, Copenhagen. January 29th, 2012.
77. "The Case for Investing in Disadvantaged Young Children," Remarks at the White House Conference on "Race to the Top - Early Learning Challenge Awards Announcement," Washington DC. December 16th, 2011.
78. "Hard Evidence on Soft Skills," The Development Economics Vice Presidency (DEC) Lecture, World Bank, Washington DC. December 15, 2011.
79. "The Developmental Origins of Health: Models and Evidence," Stephen Frankel Lecture, University of Bristol, November 16, 2011.
80. "Hard Evidence on Soft Skills," Adam Smith Lecture, 23rd Annual Conference, European Association of Labour Economists, Paphos, Cyprus, September 24, 2011.
81. "Understanding the Mechanisms Through Which an Influential Early Childhood Program Boosted Adult Outcomes," Asian Meeting of the Econometric Society, Seoul, Korea, August 12, 2011.
82. "Marschak's Maxim," Marschak Memorial Lecture, UCLA Anderson School of Management, June 3, 2011.
83. "The Economics and Psychology of Human Development and Inequality," and "The Economics and Psychology of Human Development and Inequality Lecture II: Understanding the Origins of Inequality and Understanding Effective Interventions and the Channels Through Which They Work," Marshall Lectures, University of Cambridge, Cambridge, UK. May 17-18, 2011.
84. "The Developmental Origins of Inequality: Implications for Social Policy," Manchot Lecture, University of Bonn, Bonn, Germany. January 28, 2011.
85. "Understanding the Origins of Inequality," Invited Keynote speaker, First Annual MOVE Distinguished Visitor's Lecture, December 21, 2010, Barcelona, Spain.
86. "Building Bridges Between Structural and Program Evaluation Approaches to Evaluating Policy," Keynote Lecture, Italian Statistical Society Scientific Meeting, Padua, Italy, June 16, 2010
87. "Estimating the Technology of Cognitive and Noncognitive Skill Formation," Keynote Lecture, Understanding Ageing: Health, Wealth, and Wellbeing to Age Fifty and Beyond, St. Catherine's College Oxford, UK. April 14-16, 2010.
88. "Understanding the Sources of and Solutions to Human Inequality," Keynote Lecture, Meeting on Early Childhood Education, Rio de Janeiro, Brazil. December 17, 2009.
89. "The Developmental Origins of Adult Health: Cognition, Personality, and Education," 6th Annual Nestlé International Nutrition Symposium, Lausanne, Switzerland. October 22, 2009.

90. "Policies to Promote Growth in Mexico," Bank of Mexico. October 19, 2009.
91. "Policies to Foster Human Development," Developing Africa: an Opportunity for Europe, Italy and Sicily; Taormina, Italy. October 1, 2009.
92. "Investing in our Young People: Lessons from Economics and Psychology," Lectio Magistralis, Catholic University Milan. September 28, 2009.
93. "Estimating the Technology of Cognitive and Noncognitive Skill Formation," Plenary Lecture, Econometric Society. June 6, 2009.
94. "Estimating the Technology of Cognitive and Noncognitive Skill Formation," Vilfredo Pareto Lectures in Economics and Social Sciences, Collegio Carlo Alberto. June 9, 2009.
95. "The Economics and Psychology of Personality," Identity and the Global Crisis: Festival of the Economy, Trento, Italy. May 29, 2009.
96. DEW/ESR Guest Lecture, "The Economics and Psychology of Personality." Irish Economic Association 23rd Annual Conference, Blarney, County Cork, Ireland. April 26, 2009.
97. "The Economics and Psychology of Inequality and Human Development," The Jacob Marschak Interdisciplinary Colloquium on Mathematics in the Behavior Sciences at UCLA. October 6, 2008.
98. "The Economics and Psychology of Inequality and Human Development," Marshall Lecture, European Economics Association, Milan, Italy. August 29, 2008.
99. "How Viable is the Welfare State?" World Justice Forum, Vienna, Austria. July, 2008.
100. "The Option Value of Educational Choices and the Rate of Return to Educational Choices," Cowles Foundation Structural Conference, Yale University. June 13, 2008.
101. "Skills, Schools and Synapses," Coping with the Accident of Birth: The Case for Early Childhood Interventions. Den Haag, Netherlands. May 27, 2008.
102. "Noncognitive Skills: Acquisition and Economic Consequences," Plenary Lecture, Leibniz Network Conference, Mannheim, Germany. May 15, 2008.
103. "Understanding the GED," Albert Rees Memorial Lecture, Society of Labor Economists Annual Meetings, May 9, 2008.
104. "How Viable is the Welfare State?" and "The Technology of Skill Formation," King Saud University Lecture, Riyadh, Saudi Arabia. March 8-10, 2008.
105. Congress on Early Childhood Education: "Early Childhood Education—Educational Investments with Better Effects", "The Dynamism of Educational Investments in the Course of Life: Why Saving in Education is Expensive." Leipzig, Germany. March, 2008.
106. "The Economics of Investing in Children: The Role of Cognitive and Non-Cognitive Skills," George Seltzer Distinguished Memorial Lecture, Minneapolis, Minnesota, December 6, 2007.

107. “The Economics of Investing in Children: The Role of Cognitive and Non-Cognitive Skills,” Bertha C. and Roy E. Leigh Distinguished Lecture in Economics, Pullman, Washington, November 29, 2007.
108. “The Technology of Skill Formation,” Guinness Lecture, Coombe Women’s Hospital, Dublin, Ireland, November 2, 2007.
109. “The Technology of Building Human Capacities: Lessons for Public Policy,” Building Blocks Conference, Alberta, Canada, May 2007.
110. Keynote Address, “Investing in Disadvantaged Young Children Is Good Economics and Good Public Policy,” National Summit on America’s Children, Congressional Caucus, Washington D.C., May 2007.
111. “The Economics, Technology and Neuroscience of Human Capability Formation,” Allostasis/Allostatic Load Conference, Princeton University, May 2007.
112. “Left Behind: the GED and America’s Dropout Problem,” Brookings Institution, Hamilton Project Forum: The Role of Education in Promoting Opportunity and Economic Growth, Washington D.C., March 2007.
113. Plenary Address, “The Evolution of Labor Earnings Risk in the U.S. Economy,” 4<sup>th</sup> International Finance Conference in Collaboration with Université Cergy-Pontoise, REMEREG and ISC Paris, Diar el Medina, Tunisia, March 2007.
114. Theodore W. Schultz Lecture, “The New Economics of Child Quality,” American Economic Association, January 2007.
115. Keynote Address, “What Lessons Should China Learn from European Welfare States?” WEAI Pacific Rim Conference, Beijing, China, January 2007.
116. Max Weber Lecture, “The Economics of Human Development,” European University, Florence, Italy, October 2006.
117. Koopmans Lectures, “Cowles Commission Structural Models, Causal Effects and Treatment Effects: A Synthesis,” “Instrumental Variables: Then and Now,” and “The Evolution of Labor Earnings Risk in the US Economy,” Cowles Foundation, Yale University, September 2006.
118. Marshall Lecture, Annual Meeting of the European Economic Association. August, 2006.
119. Michelson Memorial Lecture, “Skills, Schools and Synapses,” US Naval Academy, September 2006.
120. Conway Institute Lecture, “The Technology and Neuroscience of Skill Formation,” University College Dublin, June 2006.
121. Ulysses Medal Lecture, “The Economics of Child Development,” University College Dublin, June 2006.

122. Invited Lecture, “Understanding Instrumental Variables in Models with Essential Heterogeneity,” “Econometric Evaluation of Public Policies : Methods and Applications” Conference, Center for Research in Economics and Statistics, Paris, December 2005.
123. Inaugural Lecture, “Credit Constraints, Family Constraints and Optimal Policies to Reduce Inequality and Promote Productivity,” Geary Institute, University College Dublin, April 2005.
124. Richard Ely Distinguished Lecturer, Johns Hopkins University, April 2005. Talks: “Inequality in America: What Role for Human Capital Policies?” “Understanding Inequality: Separating Uncertainty from Heterogeneity in Life Cycle Earnings,” “Match Bias and Economic Returns to the GED,” “Understanding Instrumental Variables in Models with Essential Heterogeneity,” “The Importance of Cognitive and Noncognitive Skills in Explaining a Variety of Socioeconomic Outcome Measures”
125. Hicks Lecture, Oxford University, April 2004.
126. Keynote Lecture, Great Hall of the People, Beijing, December 2003 (Major Lecture on China’s Investment in Human Capital at Renmin University’s Anniversary Celebration).
127. Nobel Symposium Lecturer, St. Petersburg, Russia, June 2003.
128. Munich Economic Summit, Munich, May 2003.
129. European Society for Population Economics, 2003.
130. Keynote Lecture, Tinbergen Centenary, Rotterdam, April 2003.
131. W.P. Carey Lecture, Colorado College, February 2002.
132. Miguel Sidrauski Lecture, Latin American Econometric Society Meetings, Sao Paulo, 2002.
133. Tinbergen Lecture, Royal Dutch Economics Association, October 2002.
134. Walras-Pareto Lectures, University of Lausanne, October 2002.
135. Gorman Lectures, University College, London, Fall 2001.
136. Klein Lecture, University of Pennsylvania, October 2001.
137. Review of Economics and Statistics Lecture, April 2001.
138. Economic Journal Lecture, Royal Economic Society, April 2001.
139. Jovanovich Lecture, Colorado College, February 2001.
140. Distinguished Lecture, Southern Economics Association, Washington, D.C., November 2000.
141. Fisher-Schultz Lecture, World Meeting of the Econometric Society, August 2000.
142. Yoram Ben Porath Memorial Lecture, Hebrew University, (First in series), June 2000.
143. Wildavsky Forum Lecture, University of California, Berkeley, April 1999.
144. Woytinsky Lecture, University of Michigan, October 1999.
145. Invited Lecture, Latin American Meetings of the Econometric Society, Cancun, Mexico, August 1999.



146. Invited lecturer, Econometric Society Meetings, Lima, Peru, August 1998.
147. Distinguished Lecture, Institute for Survey Research, University of Michigan, January 1998.
148. McKinley Lecturer, University of Illinois, March 1998.
149. Fishelson Memorial Lecture, Tel Aviv University, December 1998.
150. Malim Harding Lecturer, University of Toronto, October 1997.
151. Jacob Marschak Lecturer, Far Eastern Econometric Society Meetings, Hong Kong, July 25, 1997.
152. Economics Study Group, Gronigen, Holland, June 1997.
153. Invited Lecture, Latin American Econometric Society Meetings, Santiago, Chile, August 1997.
154. *Journal of Applied Econometrics* Lectures (First Lecturer in a new series established by the *Journal of Applied Econometrics*, Yale University, April 17–18, 1997).
155. Keynote Lecture, Latin American Econometric Society, Santiago Chile, August 1997.
156. Keynote Lecture, Society For Economic Dynamics and Control, Mexico City, June 27, 1996.
157. Keynote Lecture, Latin American Econometric Society, Rio de Janeiro, August 1996.
158. Keynote Speaker, American Sociological Association Meetings, New York, August 16, 1996.
159. Gilbert Lecture, University of Rochester, April 1996.
160. Seymour Harris Lectures, Kennedy School of Government, 1995. (First lecturer in a newly endowed series) Lectures to be published by Harvard University Press.
161. Distinguished Quantitative Social Science Lecture, University of Indiana, April 1996.
162. Invited Lecture, Centenary of Ragnar Frisch, First Nobel Economist, Oslo, March 1995.
163. Invited Lecture, Public Policy School, SUNY Albany, October 1994.
164. Invited Lecture, Latin American Econometric Society, Caracas, August 1994.
165. Aloysius Dunaway Memorial Lecture, Michigan State University, April 1993.
166. Carl Synder Memorial Lecture, University of California at Santa Barbara, Spring 1992.
167. H. Chase-Stone Lecture in Economics, Colorado College, 1992 (participant in three day symposium).
168. Martin Luther King Lecturer, University of Michigan, 1991.
169. Invited Lecture, Econometric Study Group, Royal Economic Society, Bristol, England, 1991.
170. Barcelona Lecture, Sixth World Econometric Society, 1990.
171. Erik Malmstens Distinguished Guest Professor of Economics, Gothenburg University, Gothenburg, Sweden, 1990.
172. Invited Major Lecture, University of Western Ontario, 1989.

173. Invited Major Guest Lecture, Joint Franco-Belgian Conference in Statistics, Toulouse, France, 1988.
174. Chung-Hua Distinguished Visitor and Academica Sinica Lectures, Taiwan, 1988.
175. Fish Lecture, Brigham Young University, 1987.
176. Harry Lyman Hooker Distinguished Visiting Professor, McMaster University, 1987.
177. Leif Johansen Lecture, University of Oslo, 1986.
178. Abbott Lecturer, Colorado College, 1985.
179. Major Lecture, Australasian Econometric Society, Sydney, Australia, 1984.

### **Students (Chair or co-chair of committee)**

There are numerous other dissertations where I have served as a second reader, but not as chair or co-chair.

University of Chicago unless otherwise noted.

1. John Abowd
2. Amanda Agan
3. Ricardo Avelino
4. Alessandro Barbarino
5. Ricardo Barros
6. Herbert Baum
7. Andrea Beller (Columbia)
8. Christina Bellido
9. George Borjas (Columbia)
10. Stephen Cameron
11. Pedro Carneiro
12. Thomas Coleman
13. Robert Cotterman
14. Flavio Cunha
15. Marcello Dabos
16. Felipe Diniz
17. Christopher Flinn
18. Christina Gathmann
19. Miriam Gensowski

20. Eric Gould
21. Carolyn Heinrich (Harris School, University of Chicago)
22. Bo Honoré
23. Anjini Kochar
24. Tom Lam
25. Siu Fei Leung
26. Martin Ljunge
27. Lance Lochner
28. Thomas MaCurdy
29. Grecia Maruffo
30. Mauricio Mazocco
31. Robert Miller
32. Seong Hyeok Moon
33. Stefano Mosso
34. Salvador Navarro
35. Randall Olsen
36. Larry Olson
37. Brook Payner
38. Carola Pessino
39. Heleno Pioner
40. Richard Robb
41. Russell Roberts
42. Maria Rosales (Harris)
43. Rebecca Roselius
44. Mark Rosenzweig (Columbia)
45. Anne Royalty (Yale)
46. Daniel Santos
47. Peter Savelyev
48. Robert Schmitz
49. Peter Schochet (Yale)
50. Sam Schulhofer-Wohl
51. Jeff Smith

52. Rachel Soloveichik
53. Jora Stixrud
54. Suchanan Tambunlertchai
55. Chris Taber
56. Andrea Tiseno
57. Justin Tobias
58. Petra Todd
59. Grace Tsiang
60. Gabriel Ulyssea
61. J. H. Verkerke (Yale)
62. Edward Vytlačil
63. Jim Walker
64. Benjamin Williams

## **Publications**

### **Books**

*Longitudinal Analysis of Labor Market Data*, (edited with Burton Singer). Cambridge: Cambridge University Press, 1985.

*Handbook of Econometrics*, Vol 5 (edited with E. L. Leamer). New York: North-Holland, 2001.

*Inequality in America: What Role for Human Capital Policy?*. J. Heckman and A. Krueger, eds., Cambridge, MA: MIT Press, 2003.

*Law and Employment: Lessons From Latin America and the Caribbean* (edited with C. Pages). University of Chicago Press, for NBER, 2004.

*Handbook of Econometrics*, Vol 6A (edited with E. L. Leamer). Amsterdam: North-Holland, 2007.

*Handbook of Econometrics*, Vol 6B (edited with E. L. Leamer). Amsterdam: North-Holland, 2007.

*Global Perspectives on the Rule of Law*, (edited with R. Nelson and L. Cabatingan). New York: Routledge, 2010.

*Giving Kids a Fair Chance*. Cambridge, MA: MIT Press, 2012.

*The Myth of Achievement Tests: The GED and the Role of Character in American Life*, (edited with J.E. Humphries and T. Kautz). Chicago: University of Chicago Press, 2014.

### Book Reviews and Op-Ed Pieces

1. “Review of *Problems and Issues in Current Econometric Practices*,” *Journal of Economic Literature*, (December, 1974).
2. “ ‘The Cracked Bell,’ Review of Herrnstein and Murray, *The Bell Curve*,” *Reason*, March, 1995.
3. “Catch ’em Young: Investing in Disadvantaged Young Children is Both Fair and Efficient,” *Wall Street Journal*, January 10, 2006, p. A14.
4. “Comments on *Are Protective Labor Market Institutions at the Root of Unemployment? A Critical Review of the Evidence* by David Howell, Dean Baker, Andrew Glyn and John Schmidt.” *Capitalism and Society*, 2(1, Article 5, 2007).
5. “Educated in America: College graduates and high school dropouts: The declining American high school graduation rate: Evidence, sources, and consequences,” (with P. A. LaFontaine), CEPR Policy Research VOX Report, February 13, 2008.
6. “The Case for Investing in Disadvantaged Young Children,” CESifo DICE Report, February 2008.
7. “The growing polarisation of American society and its implications for productivity: Schools, Skills and Synapses,” CEPR Policy Research VOX Report, August 25, 2008.
8. “Lasting Economic and Social Benefits,” *New York Times*, Room for Debate. February 25, 2013.
9. “Lifelines for Poor Children,” *New York Times*, Opinionator, p. SR5. September 14, 2013.
10. “The Elementary and Secondary Education Act: Reauthorize an Early Start and a Great Finish.” Roll Call. February 6, 2015.
11. “Early Childhood Education and Social Mobility,” (with S. Elango, J-L. García, and A. Hojman). VoxEU, January 12, 2016.

### Journal Articles

1. “A Note on Second Best Conditions for Public Goods,” (with R. Nelson), *Public Finance*, 27(1):73-74 (1972).
2. “Empirical Evidence on the Functional Form of the Earnings-Schooling Relationship,” (with S. Polachek), *Journal of the American Statistical Association*, (June 1974), 69(346), 350-354. Also, NBER, mimeo (October 1972).
3. “The Estimation of Income and Substitution Effects in a Model of Family Labor Supply,” (with O. Ashenfelter), *Econometrica*, (January 1974), 42(1), 73-86. Presented at the Econometric Society Winter Meetings, (1971).
4. “Shadow Prices, Market Wages and Labor Supply,” *Econometrica*, (July 1974) 42(4): 679–94.

5. "The Effect of Day Care Programs on Women's Work Effort," *Journal of Political Economy*, (March/April 1974). Reprinted in T.W. Schultz (ed.), *Economics of the Family: Marriage, Children, and Human Capital*, (University of Chicago Press, 1974), 491-518.
6. "Life Cycle Consumption and Labor Supply: An Explanation of the Relationship Between Income and Consumption over the Life Cycle," *American Economic Review*, (March 1974).
7. "A Stochastic Model of Reproduction: An Econometric Approach," (with R. Willis), *Papers and Proceedings of the American Statistical Association*, Social Statistics Section, 1974.
8. "Estimating Labor Supply Functions," (with O. Ashenfelter), in G. Cain and H. Watts (eds.), *Labor Supply and Income Maintenance*, (Chicago: Markham Publishing Company, 1974).
9. "Measuring the Effect of an Antidiscrimination Program," (with O. Ashenfelter), July 1974 mimeo, in *Evaluating The Labor Market Effects of Social Programs*, (Princeton, N.J.: Princeton University Press, 1975). Presented at the American Economic Association Winter Meetings, 1972.
10. "Estimation of a Stochastic Model of Reproduction: An Econometric Approach," (with R. Willis), in N. Terleckyj (ed.), *Household Production and Consumption*, 40, 99-145, (New York: Columbia University Press, 1976). Presented at the Conference on Research in Income and Wealth, Washington, D.C., November 1973.
11. "Simultaneous Equation Models with both Continuous and Discrete Endogenous Variables With and Without Structural Shift in the Equations," in Goldfeld and Quandt (eds.), *Studies in Nonlinear Estimation*, Ballinger, (1976).
12. "A Life Cycle Model of Earnings, Learning and Consumption," *Journal of Political Economy*, (August 1976), 84(2), pt. 2, S11-S44.
13. "Does The Contract Compliance Program Work?: An Analysis of Chicago Data," (with K. Wolpin), *Industrial and Labor Relations Review*, (Summer 1976). Presented at a Symposium on the Effect of the Office of Federal Contract Compliance on Minority Status, Cornell University, May 1975.
14. "The Common Structure of Statistical Models of Truncation, Sample Selection and Limited Dependent Variables," *Annals of Economic and Social Measurement*, (December 1976).
15. "Introduction," *Annals of Economic and Social Measurement*, Special issue on Discrete, Qualitative and Limited Dependent Variables, (December, 1976).
16. "New Evidence on the Dynamics of Female Labor Supply," in E. Andrews and C. Lloyd (eds.), *Women in the Labor Market*. Columbia University Press, 1978. Presented at a Labor Department Conference, "Women in the Labor Market," Columbia University, September 1977.
17. "A Partial Survey of Recent Research on the Labor Supply of Women," *AEA Papers and Proceedings*, (May 1978). Invited paper, presented to the American Economic Association, New York, 1977.
18. "An Economic Analysis of the Contract Compliance Program," *Essay in Labor Market Analysis and Economic Demography in Memory of Peter Comay*, (Halstead, 1977).

19. "The Impact of the Government on the Labor Market Status of Black Americans: A Critical Review," (with R. Butler), in L. Hausman, (ed), *Equal Rights and Industrial Relations*, Madison, Wisconsin: Industrial Relations Research Association, Ch. 9.
20. "A Beta-Logistic Model For the Analysis of Sequential Labor Force Participation by Married Women," (with R. Willis), *Journal of Political Economy*, (February 1977), 85(1), 27-58, read at the Third World Econometric Society Meetings, Toronto, 1975.
21. "Comments on 'The Labor Supply Responses of Wage Earnings in the Rural Negative Income Experiment,'" in J. Palmer and J. Pechman (eds), *The Labor Supply Responses of Wage Earners in Welfare in Rural Areas: The North Carolina-Iowa Maintenance Experiment*, Brookings, 1977, Presented at the Brookings Conference on Evaluating the Results of the Rural Negative Income Tax Experiment, Washington, D.C., (January, 1977).
22. "Dummy Endogenous Variables in a Simultaneous Equation System," *Econometrica*, (July 1978). Original draft, April 1973. Final draft, April 1977, 46(4), 931-959.
23. "Labor Supply Estimates for Public Policy Evaluation," (with G. Borjas), *Proceedings of The Industrial and Labor Relations Research Association*, Chicago meetings, 1978.
24. "Simple Statistical Models for Discrete Panel Data Developed and Applied to Test the Hypothesis of True State Dependence Against The Hypothesis of Spurious State Dependence," *Annals de INSEE*, Paris, (1978), 227-269, (September, Special Issue).
25. "Sample Selection Bias as a Specification Error," *Econometrica*, (February 1979), 47(1), 153-161.
26. "Reply to Mincer and Ofek," (with R. Willis), *Journal of Political Economy*, (February 1979).
27. "Sample Selection Bias as a Specification Error with an Application to the Estimation of Labor Supply Functions," March, 1977 in J. Smith (ed.), *Female Labor Supply: Theory and Estimation*, (Princeton University Press, 1980).
28. "Addendum To Sample Selection Bias As A Specification Error," in E. Stromsdorfer and G. Farkas, *Evaluation Studies Review Annual*, Vol. 5, (Sage Publications, 1980), 69-74.
29. "Does Unemployment Cause Future Unemployment? Definitions, Questions and Answers from a Continuous Time Model of Heterogeneity and State Dependence," (with G. Borjas). Special Symposium issue on Unemployment, *Economica*, (May 1980).
30. "A Life Cycle Model of Female Labour Supply," (with T. MaCurdy), *Review of Economic Studies*, 1980, XLVII, 47-74.
31. "A Life Cycle Model of Family Labor Supply," in B. Weisbrod and H. Hughes (eds), *Human Resource, Employment and Development, Proceedings of Sixth World Congress*, (IEA, McMillan, 1983).
32. "Statistical Models for Discrete Panel Data," in C. Manski and D. McFadden (eds.), *Structural Analysis of Discrete Data With Econometric Applications*, (M.I.T. Press).
33. "The Incidental Parameters Problem and the Problem of Initial Conditions in Estimating a Discrete Time-Discrete Data Stochastic Process and Some Monte Carlo Evidence," read at

- the National Bureau of Economic Research Conference on Panel Data, Harvard University, (August 1978). In C.Manski and D. McFadden (eds.), *Structural Analysis of Discrete Data With Econometric Applications*, (M.I.T. Press), (originally scheduled for 1979; due to delays, published in 1981).
34. "Heterogeneity and State Dependence," in S. Rosen (ed.), *Studies in Labor Markets*, (University of Chicago Press, 1981), 91-139.
  35. "Current Theoretical and Empirical Studies of Labor Supply: Second Generation Studies," (with T. MaCurdy), *Research in Labor Economics*, (JAI Press Inc., 1981).
  36. "Recent Theoretical and Empirical Studies of Labor Supply: A Partial Survey," with M. Killingsworth and T. MaCurdy, presented at Oxford, 1979, in Z. Hornstein (ed), *Studies of The Labor Market*, HMS Treasury, (1981).
  37. "The Impact of the Minimum Wage on the Employment and Earnings of Workers in South Carolina," (with Sedlacek), in Vol. 5, *Report of the Minimum Wage Study Commission*, U.S. Government Printing Office, 225-272, (June 1981).
  38. "Models for the Analysis of Labor Force Dynamics," (with C. Flinn), *Advances in Econometrics*, 1, 35-95, (New York: JAI Press, 1982).
  39. "The Identification Problem in Econometric Models for Duration Data," in W. Hildenbrand (ed), *Advances in Econometrics, Proceedings of Fourth World Congress of Econometric Society*, (Cambridge University Press, 1982).
  40. "Earnings and The Distribution of Income," (with R. Michael), in *Part II, Behavioral and Social Science Research, A National Resource*, (National Academy of Science Press, 1982).
  41. "New Methods For Analyzing Individual Event Histories," (with C. Flinn), *Sociological Methodology*, 99-140, (Josey-Bass, 1982).
  42. "New Methods for Analyzing Structural Models of Labor Force Dynamics," (with C. Flinn), *Journal of Econometrics*, 18 (1982): 115-68.
  43. "Are Unemployment and out of the Labor Force Behaviorally Distinct Labor Force States?," (with C. Flinn), *Journal of Labor Economics*, 28-42, (January, 1983).
  44. "The Likelihood Function For The Multistate-Multiepisode Model in 'Models For The Analysis of Labor Force Dynamics'," (with C. Flinn), in R. Bassman and G. Rhodes, (eds), *Advances in Econometrics*, 2, 225-231, (1983).
  45. "Natural Monopoly," (with D. Evans), in D. Evans (ed.), *Breaking Up Bell: Essays on Industrial Organization and Regulation*, 127-156, (North Holland, 1983).
  46. "Multiproduct Cost Function Estimates and Natural Monopoly Tests for the Bell System," (with D. Evans), in D. Evans, (ed.), *Breaking Up Bell: Essays on Industrial Organization and Regulation*, Chapter 10, 253-282, (North Holland, 1983).
  47. "A Method for Minimizing the Impact of Distributional Assumption in Econometric Models for Duration Data," (with B. Singer), *Econometrica*, **52**(2): 271-320 (1984).
  48. "The Identifiability of the Proportional Hazard Model," (with B. Singer), *Review of Economic Studies*, 231-241, (April, 1984).



49. "Population Heterogeneity in Demographic Models," (with B. Singer), in A. Rodgers and K. Land (eds.), *Multidimensional Mathematical Demography*, (1984), 271-320.
50. "Comments on the Ashenfelter and Kydland Papers," *Carnegie Rochester Conference Series on Public Policy*, (1984), 209-224.
51. "Econometric Duration Analysis," (with B. Singer), *Journal of Econometrics*, (January, 1984), 63-132.
52. "The  $\chi^2$  Goodness of Fit Statistic For Models with Parameters Estimated From Microdata," *Econometrica*, (November, 1984), 52(6), 1543-1547.
53. "A Test for Subadditivity of the Cost Function With An Application to the U.S. Bell System," (with D. Evans), *American Economic Review*, (September, 1984), 615-623.
54. "Introduction," (with B. Singer), *Longitudinal Analysis of Labor Market Data*, (Cambridge: Cambridge University Press, 1985).
55. "Social Science Duration Analysis," (with B. Singer), *Longitudinal Analysis of Labor Market Data*, (University Press, 1985).
56. "A Simultaneous Equations Linear Probability Model," (with T. MaCurdy), *Canadian Journal of Economics*, (January, 1985), XVIII(1), 28-37.
57. "Alternative Methods for Estimating The Impact of Interventions," (with R. Robb), presented at Social Science Research Council Conference, Mt. Kisco, N.Y., October, 1978. In J. Heckman and B. Singer (eds.), *Longitudinal Analysis of Labor Market Data*, (Cambridge University Press, 1985).
58. "Alternative Methods for Evaluating the Impact of Interventions: An Overview," (with R. Robb), *Journal of Econometrics*, **30**(1-2): 239-267. (1985).
59. "New Evidence on the Timing and Spacing of Births," (with J. Hotz and J. Walker), *American Economic Review*, (May, 1985), 179-184.
60. "Using Longitudinal Data to Estimate Age, Period and Cohort Effects in Earnings Equations," (with R. Robb), in William M. Mason and Stephen E. Fienberg, (ed), *Cohort Analysis in Social Research Beyond the Identification Problem*, (Springer-Verlag New York Inc., 1985).
61. "Heterogeneity, Aggregation and Market Wage Functions: An Empirical Model of Self-Selection in the Labor Market," (with G. Sedlacek), *Journal of Political Economy*, (December, 1985), 93(6), 1077-1125.
62. "The Influence of Early Fertility and Subsequent Births And The Importance of Controlling For Unobserved Heterogeneity," (with J. Hotz and Jim Walker), *Bulletin of The International Statistical Institute*, (1985), 51(2).
63. "A Dynamic Model of Aggregate Output Supply, Factor Demand and Entry and Exit For A Competitive Industry with Heterogeneous Plants," (with V. K. Chetty), *Journal of Econometrics*, (1986), 33, No.1/2, 237-262.
64. "Labor Econometrics," (with T. MaCurdy), in Z. Griliches and M.D. Intriligator (ed), *Handbook of Econometrics, Vol. 3*, Chapter 3, (Elsevier Science Publishers), (1986), 1918-1977.

65. "Econometric Analysis of Longitudinal Data," (with B. Singer), in Z. Griliches and M.D. Intriligator (ed), *Handbook of Econometrics, Vol. 3*, Chapter 29, (Elsevier Science Publishers), (1986), 1690-1763.
66. "Alternative Methods For Solving The Problem of Selection Bias in Evaluating The Impact of Treatments on Outcomes," (with R. Robb) in Howard Wainer, (ed), *Drawing Inference From Self Selected Samples*, (Springer-Verlag), (1986), 63-107.
67. "The Earnings of Panamanian Males," (with J. Hotz), *Journal of Human Resources*, September, 1986.
68. "Alternative Identifying Assumptions in Econometric Models of Selection Bias," (with R. Robb), in G. Rhodes, (ed), *Advances in Econometrics*, Vol. 5, 243-287, (JAI Press, 1986).
69. "The Importance of Bundling in a Gorman-Lancaster Model of Earnings," *Review of Economic Studies*, (1987) (with J. Scheinkman), LIV, 243-255.
70. "Female Labor Supply: A Survey," (with M. Killingsworth), Chapter 2, in O. Ashenfelter and R. Layard, *Handbook of Labor Economics*, (ed.), (North Holland, 1986).
71. "Using Goodness of Fit and Other Criteria to Choose Among Competing Duration Models: A Case Study of Hutterite Data," (with J. Walker), *Sociological Methodology*, (1987), Chapter 9, 248-307.
72. "Selection Bias and The Economics of Self Selection," *The New Palgrave: A Dictionary of Economics*, (MacMillan Press, Stockton, New York), 287-296. (1987).
73. "Do We Need Experimental Data To Evaluate The Impact of Training on Earnings," (with J. Hotz and M. Dabos), *Evaluation Review*, (August 1987), 28(4), 397-427.
74. "Are Classical Experiments Necessary For Evaluating The Impact of Manpower Training Programs?: A Critical Assessment," with (J. Hotz and M. Dabos), *Industrial Relations Research Association: Proceedings Of The Annual Meeting*, (1987), 40, 291-302.
75. "Empirical Tests of Labor Market Equilibrium: A Microeconomic Perspective," *Carnegie-Rochester Conference Series on Public Policy*, (with T. MaCurdy), 28, (Spring 1988), 231-258.
76. "Time Constraints and Household Demand Functions," in T. P. Schultz, (ed.), *Research in Population Economics*, (1988).
77. "Natural Monopoly and The Bell System: A Response to Charnes, Cooper and Sueyoshi," (with D. Evans), *Management Science*, (January, 1988), 27-38.
78. "The Value of Longitudinal Data For Evaluating The Impact of Treatments on Outcomes," (with R. Robb) in G. Duncan and G. Kalton, (eds.), *Panel Surveys*, (Wiley: New York, 1988), 512-538.
79. "The Impact of the Economy and the State on the Economic Status of Blacks: A Study of South Carolina," (with R. Butler and B. Payner) in D. Galenson, (ed.), *Markets and Institutions*, (Cambridge: Cambridge University Press, 1989), 321-343.

80. "How Voluntary is Black Unemployment and Black Labor Force Withdrawal?" in W. Darity and S. Schulman, (eds), *The Question of Discrimination: Racial Inequality in the U.S. Labor Market*, (Connecticut: Wesleyan University Press, 1989), 50-80.
81. "Determining The Impact of Federal Anti-discrimination Policy on The Economic Status of Blacks: A Study of South Carolina," (with B. Payner), *American Economic Review*, (March 1989), 79(1), 138-177.
82. "Affirmative Action and Black Employment," *Proceedings Of The Industrial Relations Research Association*, (1989), 41, 320-329.
83. "The Identifiability Of The Competing Risks Model," (with Bo Honoré), *Biometrika*, (June 1989), 76(2), 325-30.
84. "Choosing Among Alternative Non-experimental Methods For Estimating The Impact of Social Programs: The Case of Manpower Training," (with V. J. Hotz). Symposium paper with invited discussion, featured invited paper, American Statistical Association meeting, *Journal of the American Statistical Association*, (December 1989), 84(408), 862-874.
85. "Forecasting Aggregate Period Specific Birth Rates: Time Series Properties of a Microdynamic Neoclassical Model of Fertility," (with J. Walker), *Journal of The American Statistical Association*, (December, 1989), 84(408), 958-965.
86. "The Empirical Content of the Roy Model," with Bo Honore, *Econometrica*, (September, 1990), 58(5), 1121-1149.
87. "Self Selection and The Distribution of Hourly Wage Rates," with (G. Sedlacek), *Journal of Labor Economics*, (January 1990), 8(1), Part 2, S329-S363.
88. "Causal Inference and Nonrandom Samples," *Symposium on Selection Bias Models, Journal of Educational Statistics*, 14(2), (Summer 1989), 159-168, reprinted in J. Schaeffer, (ed.), *The Role of Models in Non-experimental Social Science: Two Debates*, 1991.
89. "The Third Birth in Sweden," (with J. Walker), *Journal of Population Economics*, (1990), 3(4), 235-275.
90. "A Method of Moments Estimator for The Mixing Distribution of a Mixture of Exponentials Model and A Mixture of Geometrics Model," presented at IC2 Conference, Durham, N.C., (May 1988), in W. Barnett, J. Powell and G. Tauchen, (eds.), *Nonparametric Estimation of Econometric Models*, (Cambridge: Cambridge University, 1990).
91. "Estimating Fecundability from Data on Waiting Times to First Conceptions," (with J. Walker), *The Journal of the American Statistical Association*, (June, 1990), 85(410), 283-294.
92. "The Relationship Between Wages and Income and the Timing and Spacing of Births: Evidence from Swedish Longitudinal Data," (with J. Walker). *Econometrica*, (November, 1990). 58(6): 1411-1441.
93. "A Nonparametric Method of Moments Estimator for the Mixture of Geometrics Model," in J. Hartog, et. al., *Panel Data and Labor Market Studies*, (North Holland, 1990).
94. "Economic Models of Fertility Dynamics: A Study of Swedish Fertility," (with J. Walker), in T. P. Schultz, (ed.), *Research in Population Economics*, (Greenwich, CT: JAI Press, 1990), Vol. 7, 3-91.

95. "Testing The Mixture of Exponentials Hypothesis and Estimating The Mixing Distribution by the Method of Moments," (with R. Robb and J. Walker), *Journal of The American Statistical Association*, (June 1990), 85(410), 582-589.
96. "The Impact of The Great Society on Social Science," *Journal of Human Resources*, (Spring, 1990), 25(2), 297-304.
97. "Understanding The Economic Progress of Black Americans," in *Business in the Contemporary World*, (Summer 1990), 19-22.
98. "The Central Role of the South in Accounting For The Economic Progress of Black Americans," *Papers and Proceedings Of The American Economic Association*, (May 1990), 80(2), 242-246.
99. "Varieties of Selection Bias," *American Economic Review*, (May 1990), 80(2), 313-318.
100. "Racial Disparity and Employment Discrimination Law: An Economic Perspective" and "Rejoinder," (with R. Verkerke), *Yale Law and Policy Review*, (Summer 1990), 8(2), 276-298.
101. "Accounting for the Economic Progress of Black Americans," in R. Cornwall and P.V. Wunava, (eds.), *New Approaches to Economics and Social Analyses of Discrimination*, New York: Praeger, (1991), 331-337.
102. "Continuous vs. Episodic Change: The Impact of Affirmative Action and Civil Rights Policy on the Economic Status of Blacks," (with J. Donohue), *Journal of Economic Literature*, (December 1991), 29(4), 1603-1643.
103. "Reevaluating Federal Civil Rights Policy," (with J. Donohue), *Georgetown Law Journal*, (1991).
104. "Identifying the Hand Of The Past: Distinguishing State Dependence from Heterogeneity," *American Economic Review*, (May, 1991), 81(2), 75-79.
105. "A Nonparametric Method of Moments Estimator for the Mixtures of Exponentials Model and the Mixture of Geometrics Model," in W. Barnett, J. Powell and G. Tauchen, (eds.), *Nonparametric and Semiparametric Methods in Econometrics and Statistics*, (Cambridge University Press, 1991)
106. "Randomization and Social Policy Evaluation," paper presented at Institute For Research on Poverty conference at Arlie House in Charles Manski and Irwin Garfinkel, (eds.), *Evaluating Welfare and Training Programs*, (Harvard University Press, 1992), 201-230.
107. "Understanding Third Births in Sweden," in J. Trussell, R. Hankinson and J. Tilton, (eds.), *Demographic Applications of Event History Analysis*, (Oxford University Press, 1992).
108. "Haavelmo and the Birth of Modern Econometrics: A Review of The History of Econometric Ideas by Mary Morgan," *Journal of Economic Literature*, (June 1992), Vol. 30.
109. "Evaluating an Argument For Affirmative Action," (with T. Philipson), *Rationality and Society*, (July 1992).

110. "The Urban Institute Audit Studies: Their Methods and Findings," (with P. Siegelman), in M. Fix and R. Struyk, (eds.), *Clear and Convincing Evidence: Measurement of Discrimination in America*, Chapter 5, 187-258, (Urban Institute, Fall 1993).
111. "The Nonequivalence of High School Equivalents," (with S. Cameron), *Journal of Labor Economics*, (January 1993), 11(1), 1-47.
112. "What Has Been Learned About Labor Supply In The Past Twenty Years?," *AEA Papers and Proceedings*, (May 1993), 83(2), 116-121.
113. "Assessing The Case For Randomized Evaluation of Social Programs," in K. Jensen and P. Madsen, (eds), *Measuring Labor Market Program: Evaluating The Effects of Active Labor Market Initiatives*, Ministry of Labor, (Copenhagen, DK., May 1993).
114. "Determinants of Young Male Schooling and Training Choices," in Lisa Lynch, (ed), *Private Sector Skill Formation: International Comparisons*, (Chicago: University of Chicago Press, 1994). 201-231.
115. "Is Job Training Oversold?," *The Public Interest*, (Spring 1994), Number 115, 91-115.
116. "Econometric Mixture Models and More General Models for Unobservables," (with C. Taber), *Statistical Methods in Medical Research: Frailty Models in Survival Analysis*, (1994), 3(3), 279-299.
117. "U. S. Education and Training Policy: A Reevaluation of The Underlying Assumptions Behind The New Consensus," (with J. Smith and R. Roselius), in A. Levenson and L. C. Solmon, (eds), *Labor Markets, Employment Policy and Job Creation*, (Santa Monica, CA: Milken Institute for Job and Capital Formation), (October 1994), 83-121.
118. "Assessing The Case For Randomized Social Experiments," (with J. Smith), *Journal of Economic Perspectives*, (Spring 1995), 9(2), 85-110.
119. "The Economics of Eligibility Rules for a Social Program: A Study of the Job Training Partnership Act – A Summary Report," (with T. Devine), *Canadian Journal of Economics*, (1995).
120. "Lessons From The Bell Curve," *Journal of Political Economy*, (October 1995), 103(5), 1091-1120.
121. "Coleman's Contribution to Education: Theory and Research Styles and Empirical Research," (with D. Neal), in Jon Clark, (ed), *The Contributions of James Coleman: Falmer Sociology Series*, (Falmer Press: London/N.Y., Philadelphia), (1996), 81-102.
122. "Does Measured School Quality Really Matter? An Examination of the Earnings-Quality Relationship," (with A. Layne-Farrar and Petra Todd), in G. Burtless, (ed), *Does Money Matter? The Effect of School Resources on Student Achievement and Success*, (Brookings), (July 1996).
123. "Randomization As An Instrumental Variable," *Review of Economics and Statistics*, (May 1996), LXXVIII, 336-341.
124. "Experimental and Non-experimental Evaluation," (with J. Smith), in G. Schmid, (ed.), *International Handbook of Labor Market Policy and Evaluation*, (Elgar Publishing Company, 1996).

125. "What Do Bureaucrats Do? The Effects of Performance Standards and Bureaucratic Preferences on Acceptance Into the JTPA Program," (with J. Smith and C. Taber), in G. Libecap, (ed.), *Advances in the Study of Entrepreneurship, Innovation and Growth*, Vol. 7, 191-217, (JAI Press, 1996).
126. "Human Capital Pricing Equations with an Application to Estimating the Effect of Schooling Quality on Earnings," with (A. Layne-Farrar and P. Todd), *Review of Economics and Statistics*, (November 1996), 562-610.
127. "Consequences of Eligibility Rules for A Social Program: A Study of the Job Training Partnership Act (JTPA)," (with T. Devine), in S. Polachek, *Research in Labor Economics*, (JAI Press, 1996), 15, 111-170.
128. "What Should be our Human Capital Investment Policy?," in G. Mangum, *Of Heart and Mind*, (Upjohn, 1996), 323-342.
129. "Social Experiments: Theory and Evidence," (with J. Smith), *Okonomie und Gesellschaft*, Jahrbuch, 13, (1996), 186-214.
130. "Sources of Selection Bias in Evaluating Programs: An Interpretation of Conventional Measures and Evidence on The Effectiveness of Matching as a Program Evaluation Method," (with H. Ichimura, J. Smith and P. Todd), *Proceedings of the National Academy of Sciences*, (November 1996), 93, 13416-13420.
131. "On AIR: Identification of Causal Effects Using Instrumental Variables," *Journal of The American Statistical Association*, (June 1996).
132. "The Empirical Foundations of Calibration,"(with Lars Hansen), *Journal of Economic Perspectives*, 10(1), (Winter 1996), 87-104.
133. "Linear Probability Models of the Demand for Attributes with an Empirical Application to Estimating The Preferences of Legislators," (with J. Snyder), *RAND Journal of Economics*, (1997), 28(0), S142-S189.
134. "Assessing the Performance of Performance Standards in Public Bureaucracies," (with C. Heinrich and J. Smith), *AEA Papers and Proceedings*, (May 1997), 389-395.
135. "Cognitive Ability, Wages, and Meritocracy," (with John Cawley, Karen Conneely and Ed Vytlačil)," in B. Devlin, S. E. Fienberg, D. Resnick and K. Roeder, (eds), in *Intelligence Genes, and Success: Scientists Respond to the Bell Curve*, 179-192, (Copernicus:Springer-Verlag, 1997).
136. "The Value of Quantitative Evidence on the Effect of the Past on the Present," *AEA Papers and Proceedings*, (May 1997), 87(2), 404-408.
137. "Intellectual Roots of the Law and Economics Movement," *Law and History Review*, (Fall 1997), 15(2), 327-332.
138. "The Effects of Government Policy on Human Capital Investment and Wage Inequality," (with L. Lochner, J. Smith, C. Taber), *Chicago Policy Review*, (Spring 1997), 1(2), 1-40.
139. "Instrumental Variables: A Study of Implicit Behavioral Assumptions Used in Making Program Evaluations," *Journal of Human Resources*, (Summer 1997), 32(3), 441-462.

140. "Making The Most Out of Programme Evaluations and Social Experiments: Accounting For Heterogeneity in Programme Impacts," (with J. Smith, N. Clements), (March 1993), *Review of Economic Studies*, (October 1997), 64, 487-535.
141. "Characterizing Selection Bias Using Experimental Data," (with H. Ichimura, J. Smith and P. Todd), *Econometrica*, 1998, 66(5): 1017-1098.
142. "Matching As An Econometric Evaluation Estimator: Evidence from Evaluating a Job Training Programme," (with H. Ichimura and P. Todd), *Review of Economic Studies*, (October 1997), 64, 605-654.
143. "Accounting For Dropouts in the Evaluation of Social Experiments," (with J. Smith and C. Taber), *Review of Economics and Statistics*, (February 1998), 80(1), 1-14.
144. "The Effects of Government Policies on Human Capital Investment, Unemployment and Earnings Inequality," in *Publications of the GAAC, Symposia, Volume 5: Third Public GAAC Symposium - Labor Markets in the USA and Germany*, German-American Academic Council Foundation, Bonn, Germany, (1998).
145. "The Sensitivity of Experimental Impact Estimates: Evidence From The JTPA Study," (with J. Smith), in R. Freeman, (ed), *Youth Unemployment*, August, 1993, revised, May, 1996 and presented at a conference on Youth Transitions, Konstanz, Germany, University of Chicago and NBER, 1998.
146. "Evaluating The Welfare State," (with J. Smith), in S. Strom (ed.), *Econometrics and Economic Theory in the 20th Century: The Ragnar Frisch Centennial Symposium, Econometric Society Monograph Series*, 16, (Cambridge University Press, 1998), Chapter 8, 241-318.
147. "General Equilibrium Treatment Effects: A Study of Tuition Policy," (with L. Lochner and C. Taber), *American Economic Review*, (May 1998), 88(2), 381-386.
148. "Tax Policy and Human Capital Formation," (with L. Lochner and C. Taber), *American Economic Review*, (May 1998), 88(2), 293-297.
149. "Life Cycle Schooling and Dynamic Selection Bias: Models and Evidence for Five Cohorts of American Males," (with S. Cameron), *Journal of Political Economy*, (April 1998), 106(2), 262- 311.
150. "Explaining Rising Wage Inequality: Explorations With A Dynamic General Equilibrium Model of Earnings," (with L. Lochner and C. Taber), *Review of Economic Dynamics*, (1998), 1, 1-58.
151. "Human Capital Policy," (with Peter Klenow), in M. Boskin, (ed), *Capital Formation*, Hoover Economic Growth Conference, Hoover Institution, (1998).
152. "Detecting Discrimination," *Journal of Economic Perspectives*, (Spring 1998), 12(2).
153. "What Should Be Our Human Capital Investment Policy?," *Fiscal Studies*, 19(2), (Spring 1998).
154. "Instrumental Variables Methods For the Correlated Random Coefficient Model: Estimating The Average Rate of Return to Schooling When the Return Is Correlated With Schooling," (with E. Vytlačil), *Journal of Human Resources*, 33(4), (Fall 1998), 974-1002.

155. "Human Capital Formation and General Equilibrium Treatment Effects: A Study of Tax and Tuition Policy," (L. Lochner and C. Taber), *Fiscal Studies*, 20(1), 25-40, (March 1999).
156. "Doing it Right: Job Training and Education," *The Public Interest*, 135, (Spring 1999)
157. "Meritocracy in America: An Examination of Wages Within and Across Occupations," (with J. Cawley, and E. Vytlačil), *Industrial Relations*, 38(3), 250-296, (1999) Also published as National Bureau of Economic Research Working Paper #63
158. "Should College Attendance be Further Subsidized to Reduce Rising Wage Inequality?" (with Stephen Cameron) in M. Koster, (ed), *Financing College Tuition: Government Policies and Educational Priorities*, (AEI: Washington, DC., 1999).
159. "The Economics and Econometrics of Active Labor Market Programs," (with R. LaLonde and J. Smith) in O. Ashenfelter and D. Card, (eds), *Handbook of Labor Economics*, (North Holland, Vol. 3, 1999), 1865-2086.
160. "Local Instrumental Variables and Latent Variable Models for Identifying an Bounding Treatment Effects," with (Edward Vytlačil), *Proceedings of the National Academy of Sciences*, (April 1999), 96, 4730-4734.
161. "The Pre-Programme Earnings Dip and the Determinants of Participation in A Social Programme Implications For Simple Programme Evaluation Strategies," (with Jeffrey A. Smith), *Economic Journal*, 109, 1-37, (July 1999), Won Prize as Best Paper Published in the journal in 1999.
162. "On Policies to Reward the Value Added by Educators," (with J. Cawley and E. Vytlačil), *Review of Economics and Statistics*, (November 1999), 81(4), 720-728.
163. "Micro Data and General Equilibrium Models," (with M. Browning and L. Hansen) in J. Taylor and M. Woodford (eds), *Handbook of Macroeconomics*, (Amsterdam: Elsevier. 1999), Chapter 8, 543-633.
164. "Understanding the Role of Cognitive Ability in Accounting for the Recent Rise in the Economic Return to Education," (with J. Cawley, L. Lochner and E. Vytlačil) in K. Arrow, S. Bowles, and S. Durlauf (eds.), *Meritocracy and Economic Inequality*, (Princeton University Press: Princeton, NJ, 1999).
165. "General Equilibrium Cost Benefit Analysis of Education and Tax Policies," (with L. Lochner and C. Taber), in Gustav Ranis and Lakshmi K. Raut, (ed), *Trade, Growth and Development: Essays in Honor of T.N Srinivasan*, Chapter 14, (Elsevier Science, B.V., Amsterdam, 2000), 291-393.
166. "Causal Parameters and Policy Analysis In Economics: A Twentieth Century Retrospective," *Quarterly Journal of Economics*, (2000), 45-97.
167. "The Relationship Between Treatment Parameters within a Latent Variable Framework," with (E. Vytlačil), *Economic Letters*, (January 2000), 66(1), 33-39.
168. "Substitution and Dropout Bias in Social Experiments: A Study of an Influential Social Experiment," with Neil Hohmann, Michael Khoo and Jeffrey Smith, *Quarterly Journal of Economics*, (May 2000), 651-690.



169. “Local Instrumental Variables,” (with E. Vytlačil), in *Nonlinear Statistical Inference: Essays in Honor of Takeshi Amemiya*, C. Hsiao, K. Morimune, and J. Powell, (eds.), *Essays in Nonlinear Econometrics*, (Cambridge: Cambridge University Press), (2000).
170. “Rethinking Myths about Education and Training: Understanding the Sources of Skill Formation in a Modern Economy,” (with L. Lochner) in S. Danziger and J. Waldfogel, (eds.), *Securing the Future: Investing in Children from Birth to College*, Chapter 2, 47-83, (New York: Russell Sage Foundation, 2000).
171. “Policies to Foster Human Capital,” (with Discussion), *Research in Economics*, (2000), 54(1), 3-56.
172. “Understanding Black-White Wage Differentials 1960-1990,” (with T. Lyons and P. Todd), *American Economic Review*, (May 2000).
173. “The Cost of Job Security Regulation: Evidence from the Latin American Labor Markets, (with Carmen Pages-Serra), *Journal of the Latin American and Caribbean Economic Association*, 1(1), (Fall 2000), 109-154.
174. “Accounting for Heterogeneity, Diversity and Social Policy Evaluation,” *Economic Journal*, (2001).
175. “Identifying The Role of Cognitive Ability in Explaining The Level of and Change In the Return to Education,” (with E. Vytlačil), *Review of Economics and Statistics*, (February, 2001), 83(1), 1-12.
176. “The Dynamics of Educational Attainment for Blacks, Whites and Hispanics,” (with S. Cameron), *Journal of Political Economy*, (June 2001), 109(3), 455-499.
177. “Instrumental Variables, Selection Models, and Tight Bounds on the Average Treatment Effect,” (with E. Vytlačil) in *Econometric Evaluations of Active Labor Market Policies in Europe*, edited by M. Lechner and F. Pfeiffer, (2001).
178. “Essays: Econometrics and Empirical Economics,” *Journal of Econometrics*, (2001), 100(3-5).
179. “Policy Relevant Treatment Effects,” (with E. Vytlačil) *American Economic Review*, 91(2), (2001), 107-111.
180. “The Importance of Noncognitive Skills: Lessons from the GED Testing Program,” (with Y. Rubinstein), *AEA Papers and Proceedings*, (May, 2001).
181. “Four Parameters of Interest in the Evaluation of Social Programs,” (with J.L. Tobias and E. Vytlačil), *Southern Economic Journal*, (2001), 68 (2), 210-223.
182. “Micro Data, Heterogeneity, and the Evaluation of Public Policy: Nobel Lecture”, *Journal of Political Economy*, (2001) 109(4), 673-748.
183. “Removing the Veil of Ignorance in Accessing the Distributional Impacts of Social Policies,” (with Pedro Carneiro and Karsten Hansen), *Swedish Policy Review*, Vol 8, (2001).
184. “Three Observations on Wages and Measured Cognitive Ability,” (with John Cawley and Edward Vytlačil) *Labour Economics*, 2001.

185. “Flessibilità, Creazione del Lavoro e Globalizzazione: Il Caso Italia,” *Global and Local Economic Review*, **5**(2): 7–32, 2002.
186. “The Schooling of Southern Blacks: The Roles of Legal Activism and Private Philanthropy, 1910-1960,” (with J. Donohue and P. Todd), *The Quarterly Journal of Economics*, **117**(1): 225–268, 2002.
187. “Identifying Hedonic Models,” (with I. Ekeland and L. Nesheim), *American Economic Review*, **92**(2): 304–309, 2002.
188. “The Evidence on Credit Constraints in Post-Secondary Schooling,” (with P. Carneiro), *Economic Journal*, **112**(482):705–734, 2002.
189. “The Performance of Performance Standards,” (with C. Heinrich and J. Smith), *Journal of Human Resources*, **37**(4): 778–811, 2002.
190. “Adverse Selection and Moral Hazard in Insurance: Can Dynamic Data Help to Distinguish?” (with J. Abbring, P.-A. Chiappori and J. Pinquet), *Journal of the European Economic Association*, **1**(2-3): 512-521, 2003.
191. “Estimating Distributions of Treatment Effects with an Application to the Returns to Schooling and Measurement of the Effects of Uncertainty on College Choice,” (Klein Lecture) (with P. Carneiro and K. Hansen), *International Economic Review*, **44**(2): 361–422, 2003.
192. “Human Capital Policy” (with P. Carneiro), in J. Heckman and A. Krueger, eds., *Inequality in America: What Role for Human Capital Policy?*, (MIT Press), 2003.
193. “Wage Subsidies and Skill Formation: A Study of the Earned Income Tax Credit,” (with R. Cossa and L. Lochner) in E. Phelps, ed., *Designing Inclusion*, (Cambridge University Press), 2003.
194. “China’s Investment in Human Capital,” *Economic Development and Cultural Change*, **51**(4), 2003.
195. “Simple Estimators for Treatment Parameters within a Latent Variable Framework,” (with J. Tobias and E. Vytlačil), *Review of Economics and Statistics*, **85**(3), 2003.
196. “Conditioning, causality and policy analysis,” (Commentary), *Journal of Econometrics*, **112**, 2003.
197. “Flexibility and Job Creation: Lessons from Germany,” in P. Aghion, R. Frydman, J. Stiglitz and M. Woodford, eds., *Knowledge, Information, and Expectations in Modern Macroeconomics*, (Princeton and Oxford: Princeton University Press), 2003.
198. “The Supply Side of the Race Between Supply and Demand: Policies to Foster Skill in the Modern Economy,” (Netherlands Economic Review), *Quarterly Review of the Royal Netherlands Economic Association*, March 2003, Tinbergen Lecture (October 2002).
199. “Using Matching, Instrumental Variables and Control Functions to Estimate Economic Choice Models,” (with S. Navarro) *Review of Economics and Statistics*, **86**(1): 30–57, 2004.
200. “The Effect of Schooling and Ability on Achievement Test Scores,” (Aigner Prize paper) (with Karsten T. Hansen, Kathleen J. Mullen), *Journal of Econometrics*, **121**: 39–98, 2004.

201. “Determinants of Participation in A Social Program,” (with J. Smith) *Journal of Labor Economics*, **22**(2), April 2004.
202. “Remarks on the Life and Work of Jacob Mincer,” *Review of Economics of the Household*, **1**(4), 2004.
203. “Simulation and Estimation of Hedonic Models,” (with R. Matzkin and L. Nesheim) in T. Kehoe, T.N. Srinivasan, J. Whalley , eds., *Frontiers in Applied General Equilibrium Modeling*, (Cambridge University Press), 2004.
204. “Identification and Estimation of Hedonic Models,” (with I. Ekeland and L. Nesheim) *Journal of Political Economy*, **112**(1), 2004.
205. “Selection Bias, Comparative Advantage and Heterogeneous Returns to Education: Evidence from China in 2000,” (with Xuesong Li), *Pacific Economic Review*, **9**(3), 2004.
206. “Lessons from the Technology of Skill Formation,” *Annals of the New York Academy of Sciences*, **1038**: 1–22, 2004.
207. “Estimating treatment effects for discrete outcomes when responses to treatment vary: an application to Norwegian vocational rehabilitation programs,” (with A. Aakvik and E. Vytlačil) *Journal of Econometrics*, Aigner Prize Paper, **125**: 15–51, 2005.
208. “Measuring Disparate Impacts and Extending Disparate Impact Doctrine to Organ Transplantation,” (with R. Bornholz) *Perspectives in Biology and Medicine*, **48**(1): S95–S122, 2005.
209. “Separating Heterogeneity from Uncertainty in Measuring Income Inequality,” (2004 Hicks Lecture), (with F. Cunha and S. Navarro) *Oxford Economic Papers*, **57**: 191–261, 2005.
210. “China’s Human Capital Investment,” (new version), *China Economic Review*, **16**: 50–70, 2005.
211. “Skill Policies for Scotland,” (with D. Masterov), in D. Coyle, W. Alexander and B. Ashcroft, eds., *New Wealth for Old Nations: Scotland’s Economic Prospects*, (Princeton and Oxford: Princeton University Press), 119–165, 2005.
212. “Inequality in America: What role for human capital policies?” *Focus* (University of Wisconsin–Madison, Institute for Research on Poverty), **23**(3): 1–10, 2005.
213. “Labor Market Discrimination and Racial Differences in Premarket Factors,” (with P. Carneiro and D. Masterov), *Journal of Law and Economics*, **48**(1): 1–39, 2005.
214. “Structural Equations, Treatment, Effects and Econometric Policy Evaluation,” (with E. Vytlačil) *Econometrica*, **73**(3): 669–738, 2005.
215. “Understanding the Sources of Ethnic and Racial Wage Gaps and Their Implications for Policy,” (with P. Carneiro and D. Masterov), in R. Nelson and L. Nielsen, eds., *Handbook of Research on Employment Discrimination: Rights and Realities*, (Springer), 2005.
216. “Contributions of Zvi Griliches,” *Annales d’Economie et Statistique*, **79-80** (July-December, Special issue in tribute to Zvi Griliches), 2005.
217. “The Scientific Model of Causality,” *Sociological Methodology*, **35**: 1–97, 2005.

218. “Counterfactual Analysis of Inequality and Social Mobility,” (with F. Cunha and S. Navarro) in S. Morgan, D. Grusky and G. Fields. eds., *Mobility and Inequality: Frontiers of Research from Sociology and Economics*, Palo Alto: Stanford University Press, Chapter 4, 2006.
219. “Skill Formation and the Economics of Investing in Disadvantaged Children,” *Science*, **312** (5782): 1900-1902 (June, 2006).
220. “Economic, Neurobiological, and Behavioral Perspectives on Building America’s Future Workforce,” (with E. Knudsen, J. Cameron and J. Shonkoff) *Proceedings of the National Academy of Sciences*, **103**(27): 10155-10162 (July, 2006).
221. “Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond,” (with L. Lochner and P. Todd) in E. Hanushek and F. Welch, eds., *Handbook of the Economics of Education*, (North Holland: Amsterdam), pp. 307–458 (2006).
222. “Interpreting the Evidence on Life Cycle Skill Formation,” (with F. Cunha, L. Lochner and D. Masterov) in E. Hanushek and F. Welch, eds., *Handbook of the Economics of Education*, (North Holland: Amsterdam), pp. 697–812 (2006).
223. “Dynamic Discrete Choice and Dynamic Treatment Effects,” (with S. Navarro), *Journal of Econometrics*, **136**(2): 341-396, (February, 2007).
224. “Bias Corrected Estimates of GED Returns,” (with P. LaFontaine), *Journal of Labor Economics*, **24**(3): 661-700, (July, 2006).
225. “The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior,” (with J. Stixrud and S. Urzua), *Journal of Labor Economics*, **24**(3): 411-482, (July, 2006).
226. “Understanding Instrumental Variables in Models with Essential Heterogeneity,” (with S. Urzua and E. Vytlačil), *Review of Economics and Statistics*, **88**(3): 389-432, (2006).
227. “Economic, Neurobiological and Behavioral Perspectives on Building America’s Future Workforce” (with E. Knudsen, J. Cameron and J. Shonkoff) *World Economics*, **7**(3), (July-September, 2006).
228. “Familias y habilidades como determinantes de logros económicos y sociales (Family and Abilities as determinants of socio-economic success)” with S. Urzua, in *Familia y Felicidad: Un Circulo Virtuoso*, 2006, C. Larroulet and R. Camhi, eds. Santiago, Chile: Libertad y Desarrollo.
229. “Comments on *Are Protective Labor Market Institutions at the Root of Unemployment? A Critical Review of the Evidence* by David Howell, Dean Baker, Andrew Glyn and John Schmitt.” *Capitalism and Society*, **2**(1, Article 5). (2007).
230. “Econometric Evaluation of Social Programs, Part I : Causal Models, Structural Models and Econometric Policy Evaluation,” (with E. Vytlačil) in *Handbook of Econometrics, Volume 6B*, edited by J. Heckman and E. Leamer. Amsterdam: Elsevier, pp. 4779-4874. 2007.
231. “Econometric Evaluation of Social Programs, Part II: Using the Marginal Treatment Effect to Organize Alternative Economic Estimators to Evaluate Social Programs and to Forecast Their Effects in New Environments,” (with E. Vytlačil) in *Handbook of Econometrics, Volume 6B*, edited by J. Heckman and E. Leamer. Amsterdam: Elsevier, pp. 4875-5144. 2007.

232. “Econometric Evaluation of Social Programs, Part III: Distributional Treatment Effects, Dynamic Treatment Effects, Dynamic Discrete Choice, and General Equilibrium Policy Evaluation,” (with J. Abbring) in *Handbook of Econometrics, Volume 6B*, edited by J. Heckman and E. Leamer. Amsterdam: Elsevier, pp. 5145-5303. 2007.
233. “The Technology of Skill Formation,” (with F. Cunha), *American Economic Review*, **97**(2):31-47, (2007).
234. “The Economics, Technology and Neuroscience of Human Capability Formation,” *Proceedings of the National Academy of Sciences*, **104**(33): 13250-13255, (2007).
235. “The Productivity Argument for Investing in Young Children,” (with D. V. Masterov), *Review of Agricultural Economics*, **29**(3): 446-493, (2007).
236. “Identifying and Estimating the Distributions of *Ex Post* and *Ex Ante* Returns to Schooling,” (with F. Cunha), *Labour Economics*, **14**(6): 870-893 (2007).
237. “The Identification and Economic Content of Ordered Choice Models with Stochastic Thresholds,” (with F. Cunha and S. Navarro), *International Economic Review* **48**(4): 1273-1309 (2007).
238. “Use of Instrumental Variables in the Presence of Heterogeneity and Self-Selection: An Application to Treatments of Breast Cancer Patients,” (with A. Basu, S. Navarro-Lozano and S. Urzua), *Health Economics*, **16**(11): 1133-1157 (2007).
239. “Earnings Functions and Rates of Return,” (with L. Lochner and P. Todd), *Journal of Human Capital*, **2**(1): 1-31 (2008).
240. “Econometric Causality,” *International Statistical Review*, **76**(1): 1-27 (2008).
241. “An Assessment of Causal Inference in Smoking Initiation Research and a Framework for Future Research,” (with F. Flyer and C. Loughlin), *Economic Inquiry*, **46**(1): 37-44 (2008).
242. “The Roy Model,” (with C. Taber), in S. N. Durlauf and L. E. Blume (eds.), *New Palgrave Dictionary of Economics* (2 ed.) Palgrave Macmillan. 2008.
243. “A New Framework for the Analysis of Inequality,” (with F. Cunha), *Macroeconomic Dynamics*, **12**(Supplement 2), pp. 315-354. (2008).
244. “Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation,” (with F. Cunha), *Journal of Human Resources*, **43**(4): 738-782. (2008).
245. “The Economics and Psychology of Personality Traits,” (with L. Borghans, A. L. Duckworth, and B. ter Weel), *Journal of Human Resources*, **43**(4): 972-1059. (2008).
246. “Dynamic Policy Analysis,” (with J. H. Abbring), *The Econometrics of Panel Data* (3rd ed.), edited by L. Matyas and P. Sevestre, (Dordrecht: Springer), 2008.
247. “Identification of Treatment Effects Using Control Functions in Models with Continuous, Endogenous Treatment and Heterogeneous Effects,” (with J.P. Florens, C. Meghir and E. Vytlacil), *Econometrica*, **76**(5): 1191-1206, 2008.
248. “The Role of Income and Family Influence on Child Outcomes,” *Annals of the New York Academy of Sciences*, **1136**(Reducing the Impact of Poverty on Health and Human Development: Scientific Approaches): 307-323, 2008.

249. “Schools, Skills and Synapses,” *Economic Inquiry*, **46**(3): 289-324, 2008.
250. “The Principles Underlying Evaluation Estimators with an Application to Matching.” *Les Annales d’Economie et de Statistique*, **91-92**, pp. 9-74, (2008).
251. “Instrumental Variables in Models with Multiple Outcomes: The General Unordered Case,” (with S. Urzua and E. Vytlacil). *Les Annales d’Economie et de Statistique*, **91-92**, pp. 151-174, (2008).
252. “Gender Differences in Risk Aversion and Ambiguity Aversion,” (with L. Borghans, B. Golsteyn, and H. Meijers). *Journal of the European Economic Association*, **7**(2-3): 649-658, (2009).
253. “The Economics and Psychology of Inequality and Human Development,” (with F. Cunha). *Journal of the European Economic Association*, **7**(2-3): 320-364, (2009).
254. “The Many Contributions of Edmund Phelps: American Economic Association Luncheon Speech Honoring the 2006 Nobel Laureate in Economics,” *Capitalism and Society*, **3**(3): Article 2 (2009).
255. “Investing in Early Human Development: Timing and Economic Efficiency,” (with O. Doyle, C. Harmon and R. Tremblay). *Economics and Human Biology*, **7**(1):1-6. (2009).
256. “Comment on ‘Nietzsche and the Economics of Becoming,’ (by Richard Robb),” *Capitalism and Society*, **4**(1): Article 4. (2009).
257. “Lab Experiments are a Major Source of Knowledge in the Social Sciences,” (with A. Falk), *Science*, **326**(5952): 535–538, (2009).
258. “A Note on Adapting Propensity Score Matching and Selection Models to Choice Based Samples,” (with P. Todd). *Econometric Journal*, **12**(Supplement): S230–S234, (2009).
259. “Evaluating Marginal Policy Changes and the Average Effect of Treatment for Individuals at the Margin,” (with P. Carneiro and E. Vytlacil), *Econometrica*, **78**(1): 377–394, (2010).
260. “The Viability of the Welfare State,” in *Global Perspectives on the Rule of Law*, J. Heckman, R. Nelson and L. Cabatingan, eds. New York: Routledge, 2010. pp. 93–117.
261. “The Rate of the Return to the HighScope Perry Preschool Program,” (with S. H. Moon, R. Pinto, P. A. Saveljev, A. Yavitz). *Journal of Public Economics*, **94**: 114–128, (2010).
262. “The American High School Graduation Rate: Trends and Levels,” (with P. LaFontaine). *Review of Economics and Statistics*, **92**(2): 244–262, (2010).
263. “Comparing IV With Structural Models: What Simple IV Can and Cannot Identify,” (with S. Urzua). *Journal of Econometrics*, **156**(1), 27–37, (2010).
264. “Estimating the Technology of Cognitive and Noncognitive Skill Formation,” (with F. Cunha and S. Schennach). *Econometrica*, **78**(3), 883–931, (2010).
265. “The Effect of Prayer on God’s Attitude Toward Mankind,” *Economic Inquiry*, **48**(1), 234–235, (2010).
266. “The Education-Health Gradient,” (with G. Conti and S. Urzua). *American Economic Review: Papers & Proceedings*, **100**(2), 234–238, (May 2010).

267. “Building Bridges Between Structural and Program Evaluation Approaches to Evaluating Policy.” *Journal of Economic Literature*, **48**(2), 356–398, (June 2010).
268. “Testing the Correlated Random Coefficient Model,” (with D. Schmierer and S. Urzua). *Journal of Econometrics*, **158**, pp. 177–203, (2010).
269. “Analyzing Social Experiments as Implemented: A Reexamination of the Evidence From the HighScope Perry Preschool Program,” (with S. H. Moon, R. Pinto, P. A. Savelyev, and A. Q. Yavitz). *Quantitative Economics*, **1**(1), 1–46. (July 2010).
270. “Nonparametric Identification of Nonadditive Hedonic Models,” (with R.M. Matzkin and L. Nesheim). *Econometrica*, **78**(5), 1569–1591. (2010).
271. “Early Education and its Importance in Reducing Violence,” (with A. P. de Araújo, F. Cunha, and R. L. de Moura). In F. Giambiagi, R. Henriques, S. Pessoa, and F. Velloso (eds.), *Educação Básica no Brasil: Construindo um Futuro Melhor*, Chapter 5. Rio de Janeiro: Elsevier. pp. 95–116. (2009).
272. “Understanding the Early Origins of the Education-Health Gradient: A Framework that can also be Applied to Analyze Gene-Environment Interactions,” (with G. Conti). *Perspectives on Psychological Science*, **5**(5): 585–605. (2010).
273. “Tests of Hypotheses Arising in the Correlated Random Coefficient Model,” (with D. Schmierer). *Economic Modelling*, **27**(6): 1355-1367. (2010).
274. “The GED,” (with J. E. Humphries and N. S. Mader). In, E. A. Hanushek, S. Machin, and L. Wößmann (eds.) *Handbook of the Economics Of Education, Volume 3*. Amsterdam: North-Holland. pp. 423-484. (2011).
275. “Investing in Our Young People,” (with F. Cunha). In Arthur Reynolds, Arthur Rolnick, Michelle Englund, and Judy A. Temple, (eds.) *Cost-Effective Programs in Children’s First Decade: A Human Capital Integration*. New York: Cambridge University Press. pp. 381-414. (2010).
276. “A New Cost-Benefit and Rate of Return Analysis for the Perry Preschool Program: A Summary,” (with S.H. Moon, R. Pinto, P. Savelyev, and A. Yavitz). In Arthur Reynolds, Arthur Rolnick, Michelle Englund, and Judy A. Temple, (eds.) *Cost-Effective Programs in Children’s First Decade: A Human Capital Integration*. New York: Cambridge University Press. pp. 366-380. (2010).
277. “The Economics of Inequality: The Value of Early Childhood Education,” *American Educator*, Spring:31–47. (2011).
278. “The American Family in Black & White: A Post-Racial Strategy for Improving Skills to Promote Equality,” *Daedalus*, **140**(2):70–89. (2011).
279. “Editorial: Personality and Economics: Overview and Proposed Framework,” (with E. Ferguson and P. Corr), *Personality and Individual Differences*, **51**(3):201–209. (2011).
280. “Identification Problems in Personality Psychology,” (with L. Borghans, B. Golsteyn, and J.E. Humphries), *Personality and Individual Differences*, **51**(3):315–320. (2011).

281. “Estimating Marginal Returns to Education,” (with P. Carneiro, and E. Vytlačil), *American Economic Review*. **101**(6):2754-2871. (2011).
282. “Personality Psychology and Economics,” (with A. Duckworth, M. Almlund and T. Kautz). In E. Hanushek, S. Machin, and L. Woessman, eds., *Handbook of the Economics of Education*, Amsterdam: Elsevier. pp. 1-181. (2011).
283. “Editorial: The measurement of progress—some achievements and challenges.” (with P. Anand and M. Durand). *Journal of the Royal Statistical Society, A*, 174(4):851-855. (2011).
284. “Effective Child Development Strategies,” In E. Zigler, W. Gilliam, and W. S. Barnett, eds., *The Pre-K Debates: Current Controversies and Issues*. Baltimore MD: Paul H. Brookes Publishing Company, Inc. pp. 2-8. (2011).
285. “The Developmental Origins of Health.” *Health Economics*. **21**(1): 24-29. (2012).
286. “Hard Evidence on Soft Skills,” (with T. Kautz). Adam Smith Lecture, *Labour Economics*, **19**(4): 451-464. (2012).
287. “Primate Evidence on the Late Health Effects of Early-Life Adversity,”(with G. Conti, C. Hansman, M. Novak, A. Ruggiero, S. Suomi). *Proceedings of the National Academy of Sciences*, **109**(23): 8866-8871. (2012).
288. “Taking the Easy Way Out: How the GED Testing Program Induces Students to Drop Out.” (with P. LaFontaine, P. Rodríguez, and J. E. Humphries), *Journal of Labor Economics*, **30**(3): 495-520.(2012).
289. “An Effective Strategy for Promoting Social Mobility,” Lead Article, Forum on Promoting Social Mobility, *Boston Review*, September/October. (2012). Available online at: <http://www.bostonreview.net/forum/promoting-social-mobility-james-heckman>
290. “Transcriptional modulation of the developing immune system by early life social adversity,” (with S. Cole, G. Conti, J. Arevalo, A. Ruggiero, and S. Suomi). *Proceedings of the National Academy of Sciences*. 109(50): 20578–20583 (2012).
291. “The Economics of Child Well-Being,” (with G. Conti). *Handbook of Child Well-Being: Theories, Methods and Policies in Global Perspective*, Ben-Arieh, Asher, Casas, Ferran, Frones, Ivar. and Korbin, Jill E. (Eds.) Dordrecht: Springer-Verlag. pp. 363–402. (2013).
292. “The Developmental Approach to Child and Adult Health,” (with G. Conti). *Pediatrics*, **131**(Supplement 2): S133–S141. (2013).
293. “Understanding the Mechanisms through Which an Influential Early Childhood Program Boosted Adult Outcomes,” (with R. Pinto and P. Savelyev). *American Economic Review*, 103(6): 2052–2086 (2013).
294. “Treatment Effects: A Bayesian Perspective,” (with H. Lopes and R. Piatek). *Econometric Reviews: Bayesian Inference and Information: In Memory of Arnold Zellner*, 33(14):36–67. (2014).
295. “Estimating the Technology of Cognitive and Noncognitive Skill Formation: The Linear Case,” (with F. Cunha). In *Handbook of Developmental Systems Theory and Methodology*,



- P. C. M. Molenaar, R. M. Lerner and K. M. Newell, eds. London, UK: The Guilford Press. pp. 221-269. (2013).
296. "Older Siblings' Contributions to Young Child's Cognitive Skills," (with X. Dai). *Economic Modelling*, 35(September): 235-248. (2013).
  297. "Introduction," (with J. E. Humphries and T. Kautz). In *The Myth of Achievement Tests: The GED and the Role of Character in American Life*, edited by J. Heckman, J.E. Humphries and T. Kautz. Chicago, IL: University of Chicago Press. pp. xi-xiii. (2014).
  298. "Achievement Tests and the Role of Character in American Life," (with T. Kautz). In *The Myth of Achievement Tests: The GED and the Role of Character in American Life*, edited by J. Heckman, J.E. Humphries and T. Kautz. Chicago, IL: University of Chicago Press. pp. 3-56. (2014).
  299. "Who Are The GEDs?," (with J.E. Humphries and T. Kautz). In *The Myth of Achievement Tests: The GED and the Role of Character in American Life*, edited by J. Heckman, J.E. Humphries and T. Kautz. Chicago, IL: University of Chicago Press. pp. 139-170. (2014).
  300. "The Economic and Social Benefits of GED Certification," (with J.E. Humphries and T. Kautz). In *The Myth of Achievement Tests: The GED and the Role of Character in American Life*, edited by J. Heckman, J.E. Humphries and T. Kautz. Chicago, IL: University of Chicago Press. pp. 171-267. (2014).
  301. "The GED Testing Program Induces Students to Drop Out," (with J.E. Humphries, P. La-Fontaine, and P. Rodríguez). In *The Myth of Achievement Tests: The GED and the Role of Character in American Life*, edited by J. Heckman, J.E. Humphries and T. Kautz. Chicago, IL: University of Chicago Press. pp. 293-317. (2014).
  302. "Fostering and Measuring Skills: Interventions that Improve Character and Cognition," (with T. Kautz). In *The Myth of Achievement Tests: The GED and the Role of Character in American Life*, edited by J. Heckman, J.E. Humphries and T. Kautz. Chicago, IL: University of Chicago Press. pp. 341-430. (2014).
  303. "What Should be Done?," (with J.E. Humphries and T. Kautz). In *The Myth of Achievement Tests: The GED and the Role of Character in American Life*, edited by J. Heckman, J.E. Humphries and T. Kautz. Chicago, IL: University of Chicago Press. pp. 431-436. (2014).
  304. "Early Childhood Investments Substantially Boost Adult Health," (with F. Campbell, G. Conti, S. Moon, E. Pungello, R. Pinto, and Y. Pan). *Science*, 343(6178): 1478-1485. (2014).
  305. "Understanding Conscientiousness Across the Lifecourse: An Economic Perspective," (with G. Conti). *Developmental Psychology*, 50(5): 1451-1459. (2014).
  306. "Labor Market Returns to an Early Childhood Stimulation Intervention in Jamaica," (with P. Gertler, R. Pinto, A. Zanolini, C. Vermeerch, S. Walker, S. Chang, S. Grantham-McGregor). *Science*. **344**(6187): 998-1001. (2014).
  307. "The Economics of Human Development and Social Mobility," (with S. Mosso). *Annual Reviews of Economics*, 6: 689-733. (2014).
  308. "Fostering and Measuring Skills: Improving Cognitive and Non-Cognitive Skills to Promote Lifetime Success," (with T. Kautz, R. Diris, B. ter Weel, and L. Borghans). Report

- prepared for the Organisation of Economic Co-operation and Development, Paris. (2014). <http://www.oecd.org/edu/ceri/Fostering-and-Measuring-Skills-Improving-Cognitive-and-Non-Cognitive-Skills-to-Promote-Lifetime-Success.pdf>
309. “Human Capital, Economic Growth, and Inequality in China,” (with J. Yi). In *The Oxford Companion to the Economics of China on Human Capital*, Shenggen Fan, Ravi Kanbur, Shang-Jin Wei and Xiaobo Zhang, editors. Oxford, UK: Oxford University Press. pp. 459–464. (2014).
  310. “Bayesian Exploratory Factor Analysis,” (with G. Conti, S. Frühwirth-Schnatter, and R. Piatek). *Journal of Econometrics*, 183(1): 31–57. (2014).
  311. “Econometric Mediation Analyses: Identifying the Sources of Treatment Effects from Experimentally Estimated Production Technologies with Unmeasured and Mismeasured Inputs,” (with R. Pinto). *Econometric Reviews*, 34(1-2): 6-31. (2015).
  312. “Causal Analysis After Haavelmo,” (with R. Pinto). *Econometric Theory*, 31(01): 115-151 (2015).
  313. “The Generalized Roy Model and the Cost-Benefit Analysis of Social Programs,” (with P. Eisenhauer and E. Vytlacil). *Journal of Political Economy*, 123(2): 413-443. (2015).
  314. “Introduction to *The Distribution of Earnings and of Individual Output* by A. D. Roy,” (with M. Sattinger). *Economic Journal*, 125(583): 378402. (2015).
  315. “Introduction to *A Theory of the Allocation of Time* by Gary S. Becker,” *Economic Journal*, 125(583): 403-409. (2015).
  316. “Gary Becker: Model Economic Scientist,” *American Economic Review*, 105(5): 74-79. (2015).
  317. “Estimation of Dynamic Discrete Choice Models by Maximum Likelihood and the Simulated Method of Moments,” (with P. Eisenhauer and S. Mosso). *International Economic Review*, 56(2): 331–357. (2015).
  318. “Early Health Shocks, Intrahousehold Resource Allocation, and Child Outcomes,” (with J. Yi, J. Zhang, and G. Conti). *Economic Journal*, 125(588): F347-F371. (2015).
  319. “Intergenerational Long Term Effects of Preschool: Structural Estimates from a Discrete Dynamic Programming Model,” (with L. Raut). *Journal of Econometrics*, 191(1): 164-175. (2016).
  320. “Dynamic Treatment Effects,” (with J. E. Humphries and G. Veramendi). *Journal of Econometrics*, 191(2): 276-292. (2016).
  321. “Decomposing Trends in Inequality in Earnings into Forecastable and Uncertain Components,” (with F. Cunha). *Journal of Labor Economics*, 34(S2): S31-S65. (2016).
  322. “What grades and achievement tests measure,” (with L. Borghans, B. H. H. Golsteyn, and J. E. Humphries). *Proceedings of the National Academy of Sciences*, 113(47): 13354–13359. (2016).
  323. “Capabilities and Skills,” (with C. Corbin). *Journal of Human Capabilities and Development*, 17(3): 342-359. (2016).

324. “Early Childhood Education.” (with S. Elango, A. Hojman, and J.-L. García). In Moffitt, R. (Ed.), *Economics of Means-Tested Transfer Programs in the United States II*. Chapter 4, pp. 235-298. Chicago, IL: University of Chicago Press. (2016).
325. “The Effects of Two Influential Early Childhood Interventions on Health and Healthy Behaviors,” (with G. Conti and R. Pinto). *Economic Journal*, 126(Feature Issue): F28-F65. (2016).
326. “Symposium on Child Development and Parental Investment: Introduction,” (with M. Francesconi). *Economic Journal*, 126(Feature Issue): F1-F27. (2016).
327. “The Scandinavian Fantasy: The Sources of Intergenerational Mobility in Denmark and the U.S.” (with R. Landersø). *Scandinavian Journal of Economics*, 119(1): 178–230. (2017).
328. “Targeting Programmes Effectively,” (with J.-L. García). *Nature Human Behavior*, 1(1): Article 19. (2017).
329. “Inequality in Human Capital and Endogenous Credit Constraints,” (with R. Hai). *Review of Economic Dynamics*, 25(Special Issue on Human Capital and Inequality): 4–36. (2017).
330. “Returns to Education: The Causal Effects of Education on Earnings, Health, and Smoking,” (with J.E. Humphries and G. Veramendi). Forthcoming, *Journal of Political Economy*. (2017).
331. “Gender Differences in the Benefits of an Influential Early Childhood Program,” (with J.-L. García, D.-E. Leaf, and M.-J. Prados). Forthcoming, *European Economic Review*. (2017).
332. “Evaluation of the Reggio Approach to Early Education” (with P. Biroli, D. Del Boca, L. P. Heckman, Y. K. Koh, S. Kuperman, S. Moktan, C. Pronzato, and A. Ziff). Forthcoming *Research in Economics*. (2017).

### **Working Papers, Papers In Progress And Papers Under Review**

1. “The Non-Market Benefits of Education and Ability,” (with J. E. Humphries and G. Veramendi). Under review, *Journal of Human Capital*. (2017).
2. “A Dynamic Model of Health, Addiction, Education, and Wealth,” (with R. Hai). Unpublished manuscript, University of Chicago, Department of Economics. (2017).
3. “Unordered Monotonicity,” (with R. Pinto). Revised and resubmitted, *Econometrica*. (2017).
4. “Quantifying the Life-cycle Benefits of a Prototypical Early Childhood Program,” (with J.-L. García, D.-E. Leaf, and M.-J. Prados). Unpublished manuscript, University of Chicago, Center for the Economics of Human Development. (2017).
5. “The Life-cycle Benefits of an Influential Early Childhood Program,” (with J.-L. García, D.-E. Leaf, and M.-J. Prados). Unpublished manuscript, University of Chicago, Center for the Economics of Human Development. (2017).
6. ”Intergenerational Effects of the Perry Preschool Project,” (with G. Karapakula and J. Pantano) Unpublished manuscript, University of Chicago, Center for the Economics of Human Development. (2017).

7. “Ordered Monotonicity,” (with R. Pinto). Unpublished manuscript, University of Chicago, Center for the Economics of Human Development. (2017).
8. “The Foundations of the Mincer Model,” (with J.E. Humphries and G. Veramendi). Under revision, *Journal of Human Capital*. (2016).
9. “Private Notes on Gary Becker,” IZA Discussion Paper No. 8200. Presented at “Honoring Gary S. Becker: A Conference,” University of Chicago Law School, Chicago, IL. February 11, 2011.
10. “Inference with Imperfect Randomization: The Case of the Perry Preschool Program,” (with R. Pinto, A. M. Shaikh, and A. Yavitz). Unpublished manuscript, University of Chicago, Department of Economics, 2009. Under revision, *Econometrica*, 2011.
11. “Matching on Proxy Variables,” (with S. Schennach and B. Williams). Unpublished manuscript, University of Chicago, Department of Economics, 2011.
12. “Policies to Promote Growth and Economic Efficiency in Mexico,” (with J. Arias, O. Azuara, and P. Bernal). NBER Working Paper No. w16554. (2010).
13. “Towards Greater Understanding of Early-Adult Risky Behaviors: Cognitive Ability, Personality, and Schooling Effects.” (with G. Conti, H. Lopes, and R. Pinto). Unpublished manuscript, University of Chicago, Department of Economics, 2009.
14. “Understanding the GED,” Albert Rees Memorial Lecture, Society of Labor Economists Annual Meetings, May 9, 2008.
15. “The Option Value of Educational Choices and the Rate of Return to Educational Choices,” Cowles Foundation Structural Conference, Yale University. June 13, 2008. Under revision.
16. “The Productivity Argument for Investing in Young Children,” (with D. Masterov), Early Childhood Research Collaborative Discussion Paper, August, 2006.
17. “The Evolution of Inequality, Heterogeneity and Uncertainty in Labor Earnings in the U.S. Economy,” (with F. Cunha), NBER Working Paper No. 13526, October, 2007.
18. “Interpreting the Evidence of Family Influence on Child Development,” (with P. Carneiro and F. Cunha), unpublished, 2004.
19. “Understanding The Contribution of Legislation, Social Activism, Markets and Choice To The Economic Progress of African Americans in the Twentieth Century,” (with Petra Todd), unpublished manuscript, University of Chicago, 2003.
20. “The GED is a Mixed Signal: The Effect of Cognitive and Noncognitive Skills on Human Capital and Labor Market Outcomes,” (with Y. Rubinstein and J.Hsee), June, 2001, Revised in April 2002.
21. “Using the EITC to Test Between Two Competing Models of Skill Formation,” (with L. Lochner), unpublished manuscript, University of Chicago, 2000.

22. "Semiparametric Program Evaluation: Lessons From An Evaluation of a Norwegian Training Program," (with A. Aakvik and E. Vytlačil) unpublished manuscript, University of Chicago, 1999.
23. "The Case for Simple Estimators: Experimental Evidence From the National JTPA Study," unpublished manuscript, University of Chicago, November 1993.
24. "Alternative Approaches To The Evaluation of Social Programs: Econometric and Experimental Methods," Barcelona Lecture, Sixth World Meetings of The Econometric Society, 1990.
25. "A Sequential Model of Schooling," (with S. Cameron), Yale, 1990.
26. "The Empirical Content of Alternative Models of Labor Earnings," unpublished, 1978, revised 1982.
27. "Three State Search Models," (with T. Coleman), unpublished, April 1981.
28. "New Evidence on the Assertion that the Government has Shifted the Relative Demand Curve For Labor In Favor of Blacks," (with R. Butler), June 1978.
29. "Shadow Prices, Market Wages and Labor Supply Revisited: Some Corrections and Computational Simplifications," mimeo (June 1975).
30. "Dynamic Models of Female Labor Supply," unpublished, University of Chicago, March 1977.
31. "Internal Adjustment Costs And The Neoclassical Theory of the Firm," (with V. K. Chetty), 1971.

## **Expert Testimony Over Past Four Years**

Deposition of James J. Heckman in the NCAA Student-Athlete Name & Likeness Licensing Litigation in the United States District Court of the Northern District of California, Oakland Division, March 29, 2013.

Deposition of James J. Heckman in the matter of Garlock Sealing Technologies L.L.C. in the United States Bankruptcy Court for the Western District of North Carolina, July 10, 2013.

Testimony of James J. Heckman in the matter of Conseil Quebecois Sur Le Tabac Et La, Sante, et al. v. JTI MacDonald Corp., et at. in Province of Quebec, District of Montreal, Superior Court, April 14-15, 2014.

Testimony of James J. Heckman in the matter of Edward O'Bannon, et al. v. National collegiate Athletic Association in the United States District Court of the Northern District of California, Oakland Division, June 17-18, 2014.

## APPENDIX B: MATERIALS RELIED UPON

### Academic Articles, Technical Reports, and Books

Akerlof, George A. and Rachel E. Kranton. "Economics and Identity." *The Quarterly Journal of Economics* 115.3 (2000): 715-753.

Akerlof, George A. and Rachel E. Kranton. "Identity and Schooling: Some Lessons for the Economics of Education." *Journal of Economic Literature* 40 (2002): 1167-1201.

Ashforth, Blake E. and Fred Mael. "Social Identity Theory and the Organization." *Academy of Management Review* 14.1 (1989): 20-39.

Becker, Gary S. "Investment in Human Capital: A Theoretical Analysis." *Journal of Political Economy* 70.5 (1962): 9-49.

Becker, Gary S. *Human Capital*, Third Edition, 1993.

Becker, Gary S. and George J. Stigler. "Law Enforcement, Malfeasance, and Compensation of Enforcers." *The Journal of Legal Studies* 3 (1974): 1-18.

Belley, Philippe and Lance Lochner. "The Changing Role of Family Income and Ability in Determining Educational Achievement." *Journal of Human Capital* 1.1 (2007): 37-89.

Betts, Julian R. "What Do Students Know About Wages? Evidence from a Survey of Undergraduates." *The Journal of Human Resources* 31.1 (1996): 27-56.

Borjas, George. *Labor Economics* (7<sup>th</sup> ed.). Chicago, IL: McGraw-Hill Education, 2015. 144-202.

Bowen, Howard and Paul Savelle. "Who Benefits from Higher Education – and Who Should Pay?" *American Association for Higher Education* Aug. 1972: 1-46.

Burdett, Kenneth and Dale T. Mortensen. "Equilibrium Wage Differentials and Employer Size." *Northwestern Center for Mathematical Studies* 860 (1989): 1-32.

Card, David, Alexandre Mas, Enrico Moretti, and Emmanuel Saez. "Inequality at Work: The Effect of Peer Salaries on Job Satisfaction." *The American Economic Review* 102.6 (2012): 2981-3003.

Chetty, Raj, et al. "How Does Your Kindergarten Classroom Affect Your Earnings? Evidence From Project STAR." *The Quarterly Journal of Economics* 126.4 (2011): 1593-1660.

Clotfelter, Charles T., Ronald G. Ehrenberg, Malcolm Getz, and John J. Siegfried. "Introduction to 'Economic Challenges in Higher Education'" in *Economic Challenges in Higher Education* (1991): 1-16.

Fehr, Ernst, and Klaus M. Schmidt. "A Theory of Fairness, Competition, and Cooperation." *The Quarterly Journal of Economics* 114.3 (1999).

Goldberger, Arthur S. *A Course In Econometrics*. Cambridge, MA and London, England: Harvard University Press, 1991.

Hai, Rong and James J. Heckman. "Inequality in Human Capital and Endogenous Credit Constraints." *Review of Economic Dynamics* 25 (2017): 4-36.

Heckman, James J., John E. Humphries, and Gregory Veramendi. "The Non-Market Benefits of Education and Ability." *Working Paper* (2016).

Keane, Michael P., and Kenneth I. Wolpin. "The Career Decisions of Young Men." *Journal of Political Economy* 105.3 (1997): 473-522.

Kline, Patrick, and Christopher R. Walters. "Evaluating Public Programs with Close Substitutes: The case of Head Start." *The Quarterly Journal of Economics* 131.4 (2016): 1795-1848.

Lazear, Edward P. "Why is there Mandatory Retirement?" *Journal of Political Economy* 87.6 (1979): 1261-1284.

Lazear, Edward, and Miller, Frederick H. "Minimum Wage Versus Minimum Compensation," in *Report of the Minimum Wage Study Commission, Volume 5*,. Washington, DC: United States Government Printing Office (1981).

Lazear, Edward P., Paul Oyer. "Personnel Economics." *The Handbook of Organizational Economics* (2012): 479-519.

Lochner, Lance and Alexander Monge-Naranjo. "Credit Constraints in Education." *Annual Review of Economics* 4 (2012): 225-256.

Lochner, L. and A. Monge-Naranjo. "Student Loans and Repayment: Theory, Evidence, and Policy." *Handbook of the Economics of Education* 5 (2016): 397-478.

Luttmer, Erzo F.P. "Neighbors as Negatives: Relative Earnings and Well-Being." *The Quarterly Journal of Economics* 120.3 (2005).

Matsudaira, Jordan D. "Monopsony in the Low-Wage Labor Market? Evidence from Minimum Nurse Staffing Regulations." *Review of Economics and Statistics* 96.1 (2014): 92-102.

McDearmon, J. Travis. "Hail to Thee, Our Alma Mater: Alumni Role Identity and the Relationship to Institutional Support Behaviors." *Research in Higher Education* 54 (2013): 283-302.

Murphy, Kevin M., and Finis Welch. "The Structure of Wages." *The Quarterly Journal of Economics* 107.1 (1992): 285-326.

Neumark, David and William Wascher. "Minimum Wages and Training Revisited." *Journal of Labor Economics* 19.3 (2001): 563-595.



Oreopoulos, Philip. "Do Dropouts Drop Out Too Soon? Wealth, Health and Happiness from Compulsory Schooling." *Journal of Public Economics* 91.11-12 (2007): 2213-2229.

Robinson, Joan. *The Economics of Imperfect Competition* (2<sup>nd</sup> ed.). New York, NY: St. Martin's Press, 1969.

Rothschild, Michael and Lawrence J. White. "The Analytics of the Pricing of Higher Education and Other Services in Which the Customers Are Inputs." *Journal of Political Economy* 103.3 (1995): 573-586.

Stock, James H., and Mark W. Watson, *Introduction to Econometrics, 3rd Edition*. Boston, MA: Pearson, 2015.

Tricomi, Elizabeth, Antonio Rangel, Colin F Camerer, and John P O'Doherty. "Neural Evidence for Inequality-Averse Social Preferences." *Nature* 463.7284 (2010).

Wann, Daniel L. and Thomas N. Robinson III. "The Relationship Between Sport Team Identification and Integration into and Perceptions of a University." *International Sports Journal* 6 (2002): 36-44.

Williamson, Oliver E. *The Economic Institutions of Capitalism*. New York, NY: Simon and Schuster, 1985.

Wooldridge, Jeffrey M. *Introductory Econometrics, A Modern Approach, 5th Edition*. South-Western, 2012.

### **Expert Reports**

Expert Report of James J. Heckman, *In re: NCAA Athletic Grant-In-Aid Cap Antitrust Litigation*, Case Nos. 4:14-md-02541-CW and 4:14-cv-02758 (N.D. Cal. March 21, 2017).

Declaration of Roger G. Noll, *In re: NCAA Athletic Grant-In-Aid Cap Antitrust Litigation*, Case Nos. 4:14-md-02541-CW and 4:14-cv-02758 (N.D. Cal. May 16, 2017).

### **Case Documents and Legal Filings**

Order Denying Motion for Judgment on the Pleadings, *In re: National Collegiate Athletic Association Athletic Grant-In-Aid Cap Antitrust Litigation*, Martin Jenkins, et al., v. National Collegiate Athletic Association, et al., No: 14-md-2541 CW, (N.D.Cal. August 5, 2016).

# Appendix C1

**TABLE RCHE\_N4.1A: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.061 (0.036) [-0.009 , 0.131]	
High School Sophomore BB/FB Varsity Athlete			0.059 (0.039) [-0.017 , 0.135]
High School Sophomore Non BB/FB Varsity Athlete			0.063 (0.043) [-0.021 , 0.148]
Single-Parent Household	-0.019 (0.042) [-0.102 , 0.064]	-0.017 (0.042) [-0.100 , 0.066]	-0.017 (0.043) [-0.100 , 0.066]
Family Income (\$10K)	0.007 (0.005) [-0.002 , 0.016]	0.007 (0.005) [-0.003 , 0.016]	0.007 (0.005) [-0.003 , 0.016]
Family Income Below Poverty Line	0.007 (0.067) [-0.123 , 0.138]	0.009 (0.066) [-0.121 , 0.138]	0.009 (0.066) [-0.121 , 0.138]
Number of Siblings	0.000 (0.014) [-0.027 , 0.028]	0.001 (0.014) [-0.027 , 0.028]	0.001 (0.014) [-0.027 , 0.028]
Father Education	-0.004 (0.007) [-0.018 , 0.011]	-0.004 (0.007) [-0.018 , 0.011]	-0.004 (0.007) [-0.018 , 0.011]
Mother Education	0.015 (0.008) [-0.001 , 0.031]	0.015 (0.008) [-0.002 , 0.031]	0.015 (0.008) [-0.002 , 0.031]
Urban Location	0.030 (0.036) [-0.041 , 0.101]	0.034 (0.036) [-0.036 , 0.105]	0.034 (0.036) [-0.037 , 0.105]
Cognitive Ability (Z-Score)	0.009 (0.019) [-0.028 , 0.045]	0.010 (0.019) [-0.026 , 0.047]	0.010 (0.019) [-0.027 , 0.047]
Locus of Control	-0.014 (0.036) [-0.085 , 0.056]	-0.014 (0.036) [-0.084 , 0.057]	-0.013 (0.036) [-0.084 , 0.057]

## TABLE RCHE\_N4.1A: Log Annual Wage

Dependent Variable: Logarithmic Annual Income in 1999

Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994

VARIABLES	(1)	(2)	(3)
Self Concept	0.081* (0.032) [0.019 , 0.143]	0.077* (0.032) [0.015 , 0.140]	0.077* (0.032) [0.015 , 0.140]
Non-Cognitive Ability (EXTERNAL)	-0.016 (0.063) [-0.140 , 0.108]	-0.016 (0.064) [-0.141 , 0.109]	-0.016 (0.064) [-0.141 , 0.108]
Black - not Hispanic	-0.135* (0.057) [-0.247 , -0.024]	-0.135* (0.056) [-0.246 , -0.024]	-0.134* (0.057) [-0.246 , -0.023]
American Indian or Alaska Native	-0.480* (0.242) [-0.954 , -0.007]	-0.486* (0.245) [-0.966 , -0.006]	-0.486* (0.245) [-0.967 , -0.004]
Asian or Pacific Islander	0.073 (0.090) [-0.104 , 0.249]	0.076 (0.090) [-0.101 , 0.252]	0.076 (0.090) [-0.101 , 0.252]
Hispanic or Latino	-0.108 (0.080) [-0.264 , 0.049]	-0.111 (0.080) [-0.268 , 0.046]	-0.111 (0.080) [-0.267 , 0.045]
Full Time Worker	0.790*** (0.068) [0.655 , 0.924]	0.787*** (0.068) [0.652 , 0.921]	0.787*** (0.068) [0.652 , 0.921]
Graduate in 1999 or Student in January 2000	-0.270*** (0.042) [-0.353 , -0.188]	-0.271*** (0.042) [-0.353 , -0.188]	-0.271*** (0.042) [-0.353 , -0.188]
Constant	9.479*** (0.275) [8.940 , 10.018]	9.446*** (0.278) [8.901 , 9.991]	9.449*** (0.278) [8.903 , 9.994]
Observations	1,480	1,480	1,480
Adjusted R-squared	0.253	0.254	0.253

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RCHE\_N4.1B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.051 (0.037) [-0.022, 0.123]	0.051 (0.037) [-0.022, 0.124]	0.066 (0.040) [-0.013, 0.145]			
HS Sophomore Athlete × Black	0.167 (0.115) [-0.059, 0.393]					
HS Sophomore Athlete × Income Below Poverty Line		0.192 (0.111) [-0.026, 0.409]				
HS Sophomore Athlete × Single-Parent Household			-0.027 (0.088) [-0.199, 0.145]			
High School Sophomore BB/FB Varsity Athlete				0.048 (0.041) [-0.032, 0.128]	0.052 (0.040) [-0.027, 0.131]	0.066 (0.043) [-0.018, 0.151]
High School Sophomore Non BB/FB Varsity Athlete				0.053 (0.044) [-0.033, 0.140]	0.049 (0.044) [-0.038, 0.136]	0.066 (0.048) [-0.029, 0.160]
HS Sophomore BB/FB Athlete × Black				0.156 (0.120) [-0.080, 0.392]		
HS Non BB/FB Varsity Athlete × Black				0.250 (0.149) [-0.042, 0.542]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					0.111 (0.121) [-0.126, 0.348]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					0.416** (0.152) [0.117, 0.715]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.042 (0.095) [-0.227, 0.144]
HS Non BB/FB Varsity Athlete × Single-Parent Household						-0.008 (0.109) [-0.223, 0.206]
Single-Parent Household	-0.018 (0.042) [-0.102, 0.065]	-0.018 (0.042) [-0.102, 0.065]	0.002 (0.074) [-0.143, 0.147]	-0.018 (0.043) [-0.102, 0.065]	-0.019 (0.042) [-0.103, 0.064]	0.002 (0.074) [-0.143, 0.147]
Family Income (\$10K)	0.007 (0.005) [-0.003, 0.016]	0.007 (0.005) [-0.003, 0.016]	0.007 (0.005) [-0.003, 0.016]	0.007 (0.005) [-0.003, 0.016]	0.007 (0.005) [-0.003, 0.016]	0.007 (0.005) [-0.003, 0.016]
Family Income Below Poverty Line	0.005 (0.066) [-0.123, 0.134]	-0.120 (0.085) [-0.287, 0.047]	0.009 (0.066) [-0.121, 0.139]	0.005 (0.065) [-0.123, 0.133]	-0.122 (0.086) [-0.290, 0.047]	0.010 (0.066) [-0.119, 0.140]
Number of Siblings	0.001 (0.014) [-0.027, 0.028]	0.002 (0.014) [-0.026, 0.030]	0.000 (0.014) [-0.027, 0.028]	0.001 (0.014) [-0.027, 0.028]	0.002 (0.014) [-0.026, 0.030]	0.000 (0.014) [-0.027, 0.028]

**TABLE RCHE\_N4.1B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	-0.003 (0.007) [-0.018, 0.011]	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.011]	-0.003 (0.007) [-0.018, 0.011]	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.011]
Mother Education	0.014 (0.008) [-0.002, 0.031]	0.015 (0.008) [-0.002, 0.031]	0.015 (0.008) [-0.002, 0.031]	0.014 (0.008) [-0.002, 0.031]	0.015 (0.008) [-0.002, 0.031]	0.015 (0.008) [-0.002, 0.031]
Urban Location	0.034 (0.036) [-0.036, 0.105]	0.037 (0.036) [-0.034, 0.107]	0.034 (0.036) [-0.037, 0.105]	0.034 (0.036) [-0.037, 0.105]	0.034 (0.036) [-0.037, 0.105]	0.034 (0.036) [-0.037, 0.105]
Cognitive Ability (Z-Score)	0.011 (0.019) [-0.026, 0.047]	0.010 (0.019) [-0.026, 0.047]	0.010 (0.019) [-0.026, 0.047]	0.011 (0.019) [-0.026, 0.048]	0.011 (0.019) [-0.026, 0.047]	0.010 (0.019) [-0.027, 0.047]
Locus of Control	-0.014 (0.036) [-0.085, 0.056]	-0.015 (0.036) [-0.085, 0.056]	-0.013 (0.036) [-0.084, 0.057]	-0.015 (0.036) [-0.085, 0.056]	-0.016 (0.036) [-0.086, 0.055]	-0.013 (0.036) [-0.083, 0.058]
Self Concept	0.078* (0.032) [0.016, 0.141]	0.078* (0.032) [0.016, 0.141]	0.078* (0.032) [0.015, 0.140]	0.079* (0.032) [0.016, 0.141]	0.079* (0.032) [0.016, 0.141]	0.077* (0.032) [0.015, 0.140]
Non-Cognitive Ability (EXTERNAL)	-0.015 (0.064) [-0.140, 0.109]	-0.018 (0.064) [-0.143, 0.106]	-0.014 (0.064) [-0.139, 0.111]	-0.017 (0.064) [-0.142, 0.108]	-0.019 (0.063) [-0.142, 0.105]	-0.014 (0.064) [-0.139, 0.111]
Black - not Hispanic	-0.254* (0.101) [-0.453, -0.055]	-0.140* (0.056) [-0.250, -0.030]	-0.134* (0.057) [-0.245, -0.023]	-0.254* (0.101) [-0.453, -0.056]	-0.134* (0.056) [-0.244, -0.024]	-0.132* (0.057) [-0.243, -0.020]
American Indian or Alaska Native	-0.484* (0.244) [-0.963, -0.005]	-0.498* (0.250) [-0.988, -0.009]	-0.484* (0.244) [-0.964, -0.005]	-0.484* (0.245) [-0.964, -0.003]	-0.485* (0.242) [-0.960, -0.009]	-0.482* (0.243) [-0.959, -0.005]
Asian or Pacific Islander	0.075 (0.090) [-0.101, 0.252]	0.081 (0.090) [-0.096, 0.258]	0.076 (0.090) [-0.100, 0.253]	0.075 (0.090) [-0.102, 0.252]	0.077 (0.091) [-0.101, 0.254]	0.076 (0.090) [-0.101, 0.254]
Hispanic or Latino	-0.110 (0.080) [-0.267, 0.047]	-0.111 (0.080) [-0.267, 0.046]	-0.110 (0.080) [-0.267, 0.047]	-0.110 (0.080) [-0.266, 0.046]	-0.111 (0.079) [-0.266, 0.044]	-0.112 (0.080) [-0.268, 0.044]
Full Time Worker	0.787*** (0.068) [0.653, 0.921]	0.788*** (0.068) [0.654, 0.922]	0.787*** (0.069) [0.653, 0.922]	0.788*** (0.068) [0.653, 0.922]	0.788*** (0.068) [0.654, 0.922]	0.787*** (0.069) [0.652, 0.921]
Graduate in 1999 or Student in January 2000	-0.270*** (0.042) [-0.353, -0.188]	-0.272*** (0.042) [-0.354, -0.190]	-0.270*** (0.042) [-0.353, -0.188]	-0.270*** (0.042) [-0.353, -0.188]	-0.275*** (0.042) [-0.358, -0.192]	-0.270*** (0.042) [-0.353, -0.188]
Constant	9.453*** (0.278) [8.908, 9.998]	9.460*** (0.277) [8.916, 10.004]	9.435*** (0.281) [8.884, 9.985]	9.461*** (0.279) [8.914, 10.007]	9.467*** (0.277) [8.924, 10.009]	9.435*** (0.281) [8.883, 9.986]
Observations	1,480	1,480	1,480	1,480	1,480	1,480
Adjusted R-squared	0.254	0.254	0.253	0.253	0.254	0.252

**TABLE RCHE\_N4.1B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.218*					
	(0.110)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.243*				
		(0.104)				
Incremental Effect of HS Athletics for Single-Parent Household			0.039			
			(0.078)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.204		
				(0.114)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.163	
					(0.115)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.025
						(0.085)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RCHE\_N4.1C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.110** (0.039) [0.034, 0.187]	0.044 (0.047) [-0.049, 0.137]	0.102* (0.044) [0.016, 0.188]			
College Varsity and High School BB/FB Varsity Athlete				0.130** (0.045) [0.041, 0.219]	0.051 (0.057) [-0.061, 0.162]	0.106* (0.052) [0.003, 0.209]
College Varsity Athlete Non BB/FB				0.082 (0.063) [-0.042, 0.206]	0.034 (0.069) [-0.101, 0.169]	0.097 (0.066) [-0.033, 0.227]
College Varsity Athlete × Division 1		0.161* (0.080) [0.003, 0.319]				
College Varsity Athlete × FBS			0.031 (0.101) [-0.167, 0.229]			
College BB/FB Varsity Athlete × Division 1					0.199* (0.089) [0.024, 0.373]	
College BB/FB Varsity Athlete × FBS						0.115 (0.096) [-0.072, 0.303]
College Varsity Athlete Non BB/FB × Division 1					0.111 (0.134) [-0.152, 0.374]	
College Varsity Athlete Non BB/FB × FBS						-0.109 (0.199) [-0.500, 0.281]
NCAA Division 1 School		-0.007 (0.036) [-0.077, 0.063]			-0.008 (0.036) [-0.078, 0.062]	
NCAA Division 1-A (FBS) School			-0.019 (0.039) [-0.096, 0.057]			-0.019 (0.039) [-0.096, 0.057]
Single-Parent Household	-0.020 (0.042) [-0.103, 0.064]	-0.024 (0.043) [-0.107, 0.060]	-0.020 (0.042) [-0.103, 0.063]	-0.019 (0.042) [-0.103, 0.064]	-0.025 (0.042) [-0.108, 0.058]	-0.020 (0.042) [-0.103, 0.063]
Family Income (\$10K)	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.016]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.008 (0.005) [-0.002, 0.017]
Family Income Below Poverty Line	0.021 (0.066) [-0.108, 0.151]	0.027 (0.067) [-0.104, 0.158]	0.022 (0.066) [-0.108, 0.152]	0.023 (0.066) [-0.107, 0.152]	0.028 (0.067) [-0.103, 0.159]	0.023 (0.066) [-0.107, 0.152]
Number of Siblings	-0.000 (0.014) [-0.028, 0.027]	-0.002 (0.014) [-0.029, 0.026]	-0.000 (0.014) [-0.028, 0.027]	-0.001 (0.014) [-0.028, 0.027]	-0.002 (0.014) [-0.029, 0.026]	-0.000 (0.014) [-0.028, 0.027]
Father Education	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.010]



**TABLE RCHE\_N4.1C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.014 (0.008) [-0.002, 0.031]	0.013 (0.008) [-0.003, 0.029]	0.014 (0.008) [-0.002, 0.031]	0.014 (0.008) [-0.002, 0.031]	0.013 (0.008) [-0.003, 0.029]	0.014 (0.008) [-0.002, 0.030]
Urban Location	0.033 (0.036) [-0.038, 0.105]	0.035 (0.037) [-0.037, 0.106]	0.034 (0.037) [-0.038, 0.106]	0.034 (0.036) [-0.037, 0.106]	0.036 (0.037) [-0.036, 0.108]	0.036 (0.037) [-0.036, 0.107]
Cognitive Ability (Z-Score)	0.013 (0.019) [-0.024, 0.049]	0.014 (0.019) [-0.023, 0.050]	0.014 (0.019) [-0.023, 0.051]	0.013 (0.019) [-0.023, 0.050]	0.014 (0.019) [-0.023, 0.051]	0.014 (0.019) [-0.023, 0.051]
Locus of Control	-0.014 (0.036) [-0.085, 0.056]	-0.015 (0.036) [-0.086, 0.055]	-0.014 (0.036) [-0.085, 0.056]	-0.016 (0.036) [-0.087, 0.055]	-0.016 (0.036) [-0.087, 0.054]	-0.015 (0.036) [-0.086, 0.056]
Self Concept	0.074* (0.032) [0.011, 0.137]	0.073* (0.032) [0.010, 0.136]	0.074* (0.032) [0.011, 0.137]	0.075* (0.032) [0.012, 0.138]	0.074* (0.032) [0.011, 0.137]	0.075* (0.032) [0.012, 0.138]
Non-Cognitive Ability (EXTERNAL)	-0.016 (0.063) [-0.140, 0.109]	-0.020 (0.063) [-0.143, 0.104]	-0.015 (0.064) [-0.139, 0.110]	-0.015 (0.063) [-0.140, 0.109]	-0.020 (0.063) [-0.144, 0.103]	-0.015 (0.063) [-0.139, 0.110]
Black - not Hispanic	-0.141* (0.056) [-0.251, -0.030]	-0.146** (0.056) [-0.256, -0.036]	-0.142* (0.056) [-0.252, -0.031]	-0.145* (0.056) [-0.256, -0.035]	-0.153** (0.056) [-0.263, -0.042]	-0.146** (0.057) [-0.257, -0.035]
American Indian or Alaska Native	-0.485* (0.232) [-0.939, -0.030]	-0.506* (0.223) [-0.945, -0.068]	-0.486* (0.233) [-0.943, -0.030]	-0.488* (0.230) [-0.939, -0.037]	-0.515* (0.220) [-0.945, -0.084]	-0.504* (0.224) [-0.943, -0.066]
Asian or Pacific Islander	0.082 (0.090) [-0.096, 0.259]	0.078 (0.091) [-0.100, 0.256]	0.081 (0.090) [-0.096, 0.258]	0.083 (0.090) [-0.095, 0.260]	0.080 (0.091) [-0.098, 0.259]	0.085 (0.091) [-0.093, 0.263]
Hispanic or Latino	-0.103 (0.079) [-0.258, 0.052]	-0.108 (0.079) [-0.263, 0.047]	-0.103 (0.079) [-0.258, 0.052]	-0.102 (0.079) [-0.258, 0.053]	-0.106 (0.079) [-0.262, 0.049]	-0.101 (0.079) [-0.257, 0.055]
Full Time Worker	0.782*** (0.068) [0.649, 0.915]	0.782*** (0.068) [0.649, 0.915]	0.781*** (0.067) [0.649, 0.912]	0.781*** (0.068) [0.648, 0.915]	0.782*** (0.068) [0.649, 0.914]	0.781*** (0.067) [0.650, 0.913]
Graduate in 1999 or Student in January 2000	-0.277*** (0.042) [-0.359, -0.195]	-0.274*** (0.042) [-0.357, -0.192]	-0.277*** (0.042) [-0.359, -0.195]	-0.278*** (0.042) [-0.361, -0.196]	-0.276*** (0.042) [-0.358, -0.193]	-0.278*** (0.042) [-0.360, -0.195]
Constant	9.482*** (0.275) [8.942, 10.023]	9.519*** (0.274) [8.982, 10.057]	9.482*** (0.276) [8.941, 10.022]	9.481*** (0.275) [8.941, 10.021]	9.523*** (0.274) [8.985, 10.061]	9.486*** (0.275) [8.946, 10.026]
Observations	1,480	1,480	1,480	1,480	1,480	1,480
Adjusted R-squared	0.256	0.257	0.255	0.255	0.256	0.255

**TABLE RCHE\_N4.1C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.205** (0.066)				
Incremental Effect of College Athletics for FBS Students			0.133 (0.091)			
Incremental Effect of College BB/FB Athletics for Division I Students					0.249*** (0.070)	
Incremental Effect of College BB/FB Athletics for FBS Students						0.221** (0.081)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RCHE\_N4.1D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.105* (0.041) [0.024, 0.185]	0.101* (0.039) [0.024, 0.179]	0.126** (0.042) [0.044, 0.209]			
College Varsity and High School BB/FB Varsity Athlete				0.120* (0.049) [0.024, 0.216]	0.121** (0.046) [0.030, 0.211]	0.148** (0.046) [0.058, 0.237]
College Varsity Athlete Non BB/FB				0.085 (0.064) [-0.039, 0.210]	0.074 (0.063) [-0.051, 0.198]	0.096 (0.071) [-0.042, 0.235]
College Varsity Athlete × Black	0.076 (0.113) [-0.145, 0.298]					
College Varsity Athlete × Income Below Poverty Line		0.367 (0.234) [-0.093, 0.827]				
College Varsity Athlete × Single-Parent Household			-0.084 (0.109) [-0.297, 0.130]			
College BB/FB Varsity Athlete × Black				0.084 (0.116) [-0.143, 0.312]		
College BB/FB Varsity Athlete × Income Below Poverty Line					0.360 (0.234) [-0.099, 0.820]	
College BB/FB Varsity Athlete × Single-Parent Household						-0.089 (0.138) [-0.360, 0.183]
College Varsity Athlete Non BB/FB × Black				-0.423*** (0.115) [-0.650, -0.197]		
College Varsity Athlete Non BB/FB × Income Below Poverty Line					0.372 (0.507) [-0.622, 1.366]	
College Varsity Athlete Non BB/FB × Single-Parent Household						-0.080 (0.158) [-0.391, 0.230]
Single-Parent Household	-0.020 (0.042) [-0.103, 0.064]	-0.022 (0.043) [-0.106, 0.061]	-0.004 (0.046) [-0.093, 0.086]	-0.018 (0.043) [-0.101, 0.066]	-0.022 (0.043) [-0.105, 0.062]	-0.003 (0.046) [-0.093, 0.087]
Family Income (\$10K)	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.017]
Family Income Below Poverty Line	0.024 (0.066) [-0.105, 0.154]	-0.012 (0.067) [-0.143, 0.119]	0.020 (0.066) [-0.110, 0.150]	0.024 (0.066) [-0.105, 0.153]	-0.011 (0.067) [-0.142, 0.120]	0.021 (0.066) [-0.109, 0.152]
Number of Siblings	-0.000 (0.014) [-0.028, 0.027]	0.001 (0.014) [-0.027, 0.029]	-0.001 (0.014) [-0.028, 0.027]	-0.001 (0.014) [-0.029, 0.027]	0.001 (0.014) [-0.027, 0.029]	-0.001 (0.014) [-0.029, 0.027]

**TABLE RCHE\_N4.1D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.010]	-0.004 (0.007) [-0.018, 0.010]	-0.005 (0.007) [-0.019, 0.010]	-0.004 (0.007) [-0.019, 0.010]
Mother Education	0.014 (0.008) [-0.002, 0.030]	0.014 (0.008) [-0.002, 0.031]	0.014 (0.008) [-0.002, 0.030]	0.014 (0.008) [-0.002, 0.030]	0.014 (0.008) [-0.002, 0.031]	0.014 (0.008) [-0.002, 0.031]
Urban Location	0.033 (0.036) [-0.038, 0.104]	0.033 (0.036) [-0.038, 0.105]	0.034 (0.036) [-0.037, 0.106]	0.035 (0.036) [-0.037, 0.106]	0.034 (0.037) [-0.037, 0.106]	0.036 (0.036) [-0.035, 0.107]
Cognitive Ability (Z-Score)	0.013 (0.019) [-0.023, 0.050]	0.013 (0.019) [-0.023, 0.050]	0.013 (0.019) [-0.023, 0.049]	0.013 (0.019) [-0.023, 0.050]	0.014 (0.019) [-0.023, 0.050]	0.014 (0.019) [-0.023, 0.050]
Locus of Control	-0.015 (0.036) [-0.085, 0.056]	-0.017 (0.036) [-0.087, 0.054]	-0.013 (0.036) [-0.083, 0.057]	-0.015 (0.036) [-0.086, 0.055]	-0.018 (0.036) [-0.089, 0.053]	-0.015 (0.036) [-0.086, 0.056]
Self Concept	0.074* (0.032) [0.011, 0.137]	0.075* (0.032) [0.012, 0.138]	0.073* (0.032) [0.010, 0.136]	0.075* (0.032) [0.012, 0.138]	0.076* (0.032) [0.013, 0.139]	0.074* (0.032) [0.011, 0.137]
Non-Cognitive Ability (EXTERNAL)	-0.016 (0.063) [-0.140, 0.109]	-0.019 (0.064) [-0.143, 0.106]	-0.015 (0.063) [-0.139, 0.110]	-0.014 (0.063) [-0.139, 0.110]	-0.018 (0.064) [-0.143, 0.106]	-0.014 (0.064) [-0.139, 0.111]
Black - not Hispanic	-0.160* (0.064) [-0.287, -0.034]	-0.142* (0.056) [-0.252, -0.031]	-0.140* (0.056) [-0.250, -0.030]	-0.161* (0.065) [-0.287, -0.034]	-0.146** (0.057) [-0.257, -0.035]	-0.145* (0.056) [-0.256, -0.034]
American Indian or Alaska Native	-0.485* (0.233) [-0.942, -0.028]	-0.479* (0.230) [-0.930, -0.029]	-0.488* (0.231) [-0.941, -0.034]	-0.487* (0.232) [-0.941, -0.033]	-0.483* (0.228) [-0.930, -0.035]	-0.492* (0.229) [-0.942, -0.041]
Asian or Pacific Islander	0.081 (0.090) [-0.096, 0.258]	0.083 (0.090) [-0.094, 0.260]	0.084 (0.090) [-0.094, 0.261]	0.082 (0.090) [-0.096, 0.259]	0.084 (0.090) [-0.093, 0.261]	0.085 (0.091) [-0.093, 0.262]
Hispanic or Latino	-0.104 (0.079) [-0.259, 0.052]	-0.107 (0.079) [-0.261, 0.048]	-0.102 (0.079) [-0.257, 0.054]	-0.103 (0.079) [-0.259, 0.052]	-0.105 (0.079) [-0.260, 0.049]	-0.101 (0.080) [-0.257, 0.055]
Full Time Worker	0.783*** (0.068) [0.649, 0.916]	0.783*** (0.068) [0.649, 0.916]	0.783*** (0.068) [0.649, 0.916]	0.780*** (0.068) [0.646, 0.914]	0.782*** (0.068) [0.649, 0.916]	0.782*** (0.068) [0.648, 0.916]
Graduate in 1999 or Student in January 2000	-0.277*** (0.042) [-0.360, -0.195]	-0.277*** (0.042) [-0.359, -0.195]	-0.276*** (0.042) [-0.358, -0.194]	-0.278*** (0.042) [-0.360, -0.195]	-0.278*** (0.042) [-0.360, -0.196]	-0.277*** (0.042) [-0.360, -0.194]
Constant	9.483*** (0.276) [8.943, 10.024]	9.496*** (0.276) [8.956, 10.037]	9.478*** (0.275) [8.937, 10.018]	9.483*** (0.276) [8.942, 10.023]	9.495*** (0.275) [8.955, 10.036]	9.476*** (0.276) [8.935, 10.018]
Observations	1,480	1,480	1,480	1,480	1,480	1,480
Adjusted R-squared	0.255	0.256	0.256	0.255	0.255	0.255

**TABLE RCHE\_N4.1D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.181 (0.106)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.468* (0.231)				
Incremental Effect of College Athletics for Single-Parent Household			0.043 (0.101)			
Incremental Effect of College BB/FB Athletics for Blacks				0.204 (0.106)		
Incremental Effect of College BB/FB Athletics for Income Below Poverty Line					0.481* (0.230)	
Incremental Effect of College BB/FB Athletics for Single-Parent Household						0.059 (0.132)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RCHE\_N4.2A: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.061 (0.033) [-0.003 , 0.125]	
High School Sophomore BB Varsity Athlete			0.021 (0.048) [-0.074 , 0.116]
High School Sophomore Non BB Varsity Athlete			0.074* (0.035) [0.004 , 0.143]
Single-Parent Household	-0.061 (0.040) [-0.140 , 0.018]	-0.061 (0.040) [-0.140 , 0.018]	-0.062 (0.040) [-0.142 , 0.017]
Family Income (\$10K)	0.005 (0.005) [-0.004 , 0.014]	0.004 (0.005) [-0.005 , 0.013]	0.004 (0.005) [-0.005 , 0.013]
Family Income Below Poverty Line	-0.051 (0.060) [-0.168 , 0.066]	-0.055 (0.059) [-0.172 , 0.061]	-0.056 (0.059) [-0.172 , 0.060]
Number of Siblings	-0.002 (0.014) [-0.029 , 0.024]	-0.003 (0.014) [-0.030 , 0.024]	-0.002 (0.014) [-0.029 , 0.025]
Father Education	0.011 (0.008) [-0.006 , 0.027]	0.011 (0.008) [-0.006 , 0.027]	0.011 (0.008) [-0.006 , 0.027]
Mother Education	0.003 (0.009) [-0.014 , 0.020]	0.001 (0.009) [-0.015 , 0.018]	0.001 (0.009) [-0.016 , 0.018]
Urban Location	0.011 (0.035) [-0.056 , 0.079]	0.015 (0.034) [-0.053 , 0.083]	0.011 (0.035) [-0.057 , 0.079]
Cognitive Ability (Z-Score)	-0.011 (0.021) [-0.053 , 0.031]	-0.010 (0.021) [-0.052 , 0.032]	-0.011 (0.021) [-0.054 , 0.031]
Locus of Control	0.001 (0.034) [-0.067 , 0.068]	-0.002 (0.034) [-0.069 , 0.065]	-0.001 (0.034) [-0.068 , 0.066]

## TABLE RCHE\_N4.2A: Log Annual Wage

Dependent Variable: Logarithmic Annual Income in 1999

Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994

VARIABLES	(1)	(2)	(3)
Self Concept	0.048 (0.028) [-0.007, 0.102]	0.044 (0.028) [-0.011, 0.099]	0.044 (0.028) [-0.010, 0.099]
Non-Cognitive Ability (EXTERNAL)	0.112 (0.103) [-0.091, 0.314]	0.106 (0.104) [-0.098, 0.310]	0.108 (0.104) [-0.095, 0.312]
Black - not Hispanic	0.014 (0.049) [-0.081, 0.110]	0.031 (0.050) [-0.067, 0.129]	0.035 (0.050) [-0.062, 0.133]
American Indian or Alaska Native	-0.468 (0.472) [-1.394, 0.458]	-0.460 (0.468) [-1.378, 0.457]	-0.466 (0.468) [-1.383, 0.451]
Asian or Pacific Islander	0.110 (0.061) [-0.011, 0.230]	0.121* (0.061) [0.001, 0.240]	0.116 (0.061) [-0.004, 0.236]
Hispanic or Latino	0.049 (0.056) [-0.061, 0.159]	0.059 (0.056) [-0.051, 0.169]	0.058 (0.056) [-0.052, 0.168]
Full Time Worker	0.959*** (0.057) [0.846, 1.071]	0.953*** (0.058) [0.840, 1.066]	0.952*** (0.057) [0.839, 1.064]
Graduate in 1999 or Student in January 2000	-0.127*** (0.036) [-0.198, -0.057]	-0.131*** (0.036) [-0.201, -0.060]	-0.132*** (0.036) [-0.203, -0.061]
Constant	8.601*** (0.441) [7.737, 9.465]	8.615*** (0.443) [7.746, 9.485]	8.612*** (0.443) [7.743, 9.481]
Observations	1,660	1,660	1,660
Adjusted R-squared	0.266	0.267	0.268

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RCHE\_N4.2B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.063 (0.034) [-0.004, 0.131]	0.054 (0.034) [-0.013, 0.122]	0.093* (0.037) [0.022, 0.165]			
HS Sophomore Athlete × Black	-0.037 (0.097) [-0.227, 0.153]					
HS Sophomore Athlete × Income Below Poverty Line		0.094 (0.097) [-0.096, 0.284]				
HS Sophomore Athlete × Single-Parent Household			-0.163* (0.079) [-0.317, -0.009]			
High School Sophomore BB Varsity Athlete				0.028 (0.052) [-0.073, 0.130]	0.012 (0.051) [-0.087, 0.112]	0.058 (0.053) [-0.046, 0.163]
High School Sophomore Non BB Varsity Athlete				0.074* (0.037) [0.001, 0.146]	0.068 (0.037) [-0.005, 0.141]	0.105** (0.040) [0.027, 0.183]
HS Sophomore BB Athlete × Black				-0.075 (0.135) [-0.341, 0.190]		
HS Non BB Varsity Athlete × Black				0.020 (0.116) [-0.207, 0.247]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.134 (0.140) [-0.142, 0.409]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.082 (0.104) [-0.121, 0.286]	
HS Sophomore BB Athlete × Single-Parent Household						-0.188 (0.122) [-0.427, 0.052]
HS Non BB Varsity Athlete × Single-Parent Household						-0.155 (0.085) [-0.323, 0.012]
Single-Parent Household	-0.061 (0.040) [-0.140, 0.018]	-0.063 (0.040) [-0.142, 0.016]	0.031 (0.055) [-0.076, 0.138]	-0.062 (0.040) [-0.141, 0.017]	-0.064 (0.040) [-0.143, 0.015]	0.030 (0.055) [-0.077, 0.137]
Family Income (\$10K)	0.004 (0.005) [-0.005, 0.013]	0.004 (0.005) [-0.005, 0.013]	0.004 (0.005) [-0.005, 0.013]	0.004 (0.005) [-0.005, 0.013]	0.004 (0.005) [-0.004, 0.013]	0.004 (0.005) [-0.005, 0.013]
Family Income Below Poverty Line	-0.056 (0.059) [-0.172, 0.060]	-0.103 (0.083) [-0.266, 0.061]	-0.052 (0.059) [-0.168, 0.064]	-0.059 (0.060) [-0.176, 0.058]	-0.105 (0.083) [-0.268, 0.058]	-0.054 (0.059) [-0.170, 0.063]
Number of Siblings	-0.003 (0.014) [-0.030, 0.024]	-0.003 (0.014) [-0.030, 0.024]	-0.003 (0.014) [-0.030, 0.024]	-0.002 (0.014) [-0.029, 0.025]	-0.002 (0.014) [-0.029, 0.025]	-0.003 (0.014) [-0.029, 0.024]



**TABLE RCHE\_N4.2B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.011 (0.008) [-0.006, 0.027]	0.011 (0.008) [-0.006, 0.028]	0.011 (0.008) [-0.005, 0.028]	0.011 (0.008) [-0.006, 0.027]	0.011 (0.008) [-0.006, 0.027]	0.011 (0.008) [-0.006, 0.028]
Mother Education	0.001 (0.009) [-0.016, 0.018]	0.001 (0.009) [-0.015, 0.018]	0.001 (0.009) [-0.015, 0.018]	0.001 (0.009) [-0.016, 0.018]	0.001 (0.009) [-0.016, 0.018]	0.001 (0.009) [-0.016, 0.018]
Urban Location	0.015 (0.034) [-0.052, 0.083]	0.016 (0.035) [-0.052, 0.083]	0.013 (0.034) [-0.055, 0.080]	0.011 (0.035) [-0.057, 0.079]	0.011 (0.035) [-0.057, 0.080]	0.009 (0.035) [-0.060, 0.077]
Cognitive Ability (Z-Score)	-0.010 (0.021) [-0.052, 0.031]	-0.011 (0.021) [-0.053, 0.031]	-0.010 (0.021) [-0.052, 0.031]	-0.012 (0.021) [-0.054, 0.030]	-0.012 (0.022) [-0.054, 0.030]	-0.012 (0.021) [-0.053, 0.030]
Locus of Control	-0.002 (0.034) [-0.069, 0.065]	-0.002 (0.034) [-0.069, 0.065]	0.000 (0.034) [-0.067, 0.068]	-0.002 (0.034) [-0.069, 0.065]	-0.002 (0.034) [-0.069, 0.066]	0.001 (0.034) [-0.067, 0.068]
Self Concept	0.044 (0.028) [-0.011, 0.099]	0.045 (0.028) [-0.010, 0.100]	0.043 (0.028) [-0.012, 0.099]	0.045 (0.028) [-0.010, 0.100]	0.045 (0.028) [-0.010, 0.100]	0.044 (0.028) [-0.011, 0.099]
Non-Cognitive Ability (EXTERNAL)	0.105 (0.104) [-0.099, 0.310]	0.106 (0.104) [-0.098, 0.310]	0.104 (0.104) [-0.100, 0.308]	0.107 (0.104) [-0.097, 0.311]	0.108 (0.104) [-0.095, 0.312]	0.105 (0.103) [-0.097, 0.308]
Black - not Hispanic	0.045 (0.060) [-0.073, 0.162]	0.033 (0.050) [-0.065, 0.131]	0.028 (0.050) [-0.070, 0.125]	0.044 (0.060) [-0.074, 0.162]	0.038 (0.050) [-0.059, 0.136]	0.033 (0.049) [-0.064, 0.130]
American Indian or Alaska Native	-0.460 (0.468) [-1.377, 0.457]	-0.461 (0.468) [-1.380, 0.458]	-0.467 (0.464) [-1.377, 0.443]	-0.465 (0.468) [-1.382, 0.453]	-0.466 (0.468) [-1.385, 0.452]	-0.471 (0.464) [-1.381, 0.438]
Asian or Pacific Islander	0.121* (0.061) [0.001, 0.241]	0.118 (0.061) [-0.002, 0.238]	0.123* (0.061) [0.003, 0.242]	0.117 (0.061) [-0.003, 0.238]	0.115 (0.061) [-0.005, 0.235]	0.119 (0.061) [-0.000, 0.239]
Hispanic or Latino	0.059 (0.056) [-0.051, 0.169]	0.061 (0.056) [-0.049, 0.171]	0.062 (0.056) [-0.048, 0.172]	0.059 (0.056) [-0.052, 0.169]	0.061 (0.056) [-0.049, 0.171]	0.061 (0.056) [-0.049, 0.170]
Full Time Worker	0.953*** (0.058) [0.840, 1.066]	0.952*** (0.057) [0.839, 1.065]	0.958*** (0.058) [0.845, 1.071]	0.951*** (0.058) [0.839, 1.064]	0.951*** (0.057) [0.838, 1.064]	0.957*** (0.058) [0.844, 1.070]
Graduate in 1999 or Student in January 2000	-0.130*** (0.036) [-0.201, -0.060]	-0.131*** (0.036) [-0.201, -0.060]	-0.131*** (0.036) [-0.202, -0.061]	-0.132*** (0.036) [-0.203, -0.062]	-0.132*** (0.036) [-0.203, -0.061]	-0.133*** (0.036) [-0.203, -0.062]
Constant	8.616*** (0.444) [7.746, 9.486]	8.617*** (0.443) [7.748, 9.486]	8.597*** (0.442) [7.731, 9.463]	8.616*** (0.443) [7.746, 9.485]	8.613*** (0.443) [7.744, 9.481]	8.598*** (0.439) [7.736, 9.460]
Observations	1,660	1,660	1,660	1,660	1,660	1,660
Adjusted R-squared	0.267	0.267	0.269	0.267	0.267	0.268

**TABLE RCHE\_N4.2B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.026 (0.091)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.148 (0.091)				
Incremental Effect of HS Athletics for Single-Parent Household			-0.069 (0.070)			
Incremental Effect of HS BB Athletics for Blacks				-0.047 (0.125)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.146 (0.132)	
Incremental Effect of HS BB Athletics for Single-Parent Household						-0.129 (0.111)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RCHE\_N4.2C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.028 (0.046) [-0.062, 0.118]	0.036 (0.063) [-0.087, 0.159]	0.020 (0.051) [-0.081, 0.121]			
College Varsity and High School BB Varsity Athlete				-0.054 (0.070) [-0.190, 0.082]	-0.018 (0.093) [-0.201, 0.166]	-0.027 (0.079) [-0.183, 0.128]
College Varsity Athlete Non BB				0.076 (0.057) [-0.035, 0.188]	0.073 (0.078) [-0.081, 0.226]	0.049 (0.063) [-0.075, 0.173]
College Varsity Athlete × Division 1		0.007 (0.090) [-0.169, 0.184]				
College Varsity Athlete × FBS			0.046 (0.114) [-0.178, 0.270]			
College BB Varsity Athlete × Division 1					-0.073 (0.129) [-0.325, 0.180]	
College BB Varsity Athlete × FBS						-0.177 (0.132) [-0.436, 0.082]
College Varsity Athlete Non BB × Division 1					0.028 (0.112) [-0.192, 0.247]	
College Varsity Athlete Non BB × FBS						0.151 (0.144) [-0.131, 0.433]
NCAA Division 1 School		0.063 (0.035) [-0.006, 0.132]			0.063 (0.035) [-0.006, 0.132]	
NCAA Division 1-A (FBS) School			-0.002 (0.038) [-0.077, 0.073]			-0.002 (0.038) [-0.077, 0.073]
Single-Parent Household	-0.060 (0.040) [-0.139, 0.019]	-0.063 (0.040) [-0.142, 0.016]	-0.060 (0.041) [-0.139, 0.020]	-0.059 (0.040) [-0.138, 0.020]	-0.062 (0.040) [-0.141, 0.017]	-0.059 (0.041) [-0.139, 0.020]
Family Income (\$10K)	0.005 (0.005) [-0.004, 0.014]	0.004 (0.005) [-0.005, 0.013]	0.005 (0.005) [-0.004, 0.014]	0.005 (0.005) [-0.004, 0.014]	0.005 (0.005) [-0.005, 0.014]	0.005 (0.005) [-0.004, 0.014]
Family Income Below Poverty Line	-0.051 (0.059) [-0.168, 0.065]	-0.046 (0.060) [-0.163, 0.071]	-0.051 (0.060) [-0.168, 0.065]	-0.051 (0.060) [-0.168, 0.065]	-0.045 (0.060) [-0.162, 0.072]	-0.049 (0.060) [-0.166, 0.069]
Number of Siblings	-0.002 (0.014) [-0.029, 0.024]	-0.003 (0.014) [-0.029, 0.024]	-0.002 (0.014) [-0.029, 0.024]	-0.002 (0.014) [-0.028, 0.025]	-0.002 (0.014) [-0.029, 0.024]	-0.002 (0.014) [-0.029, 0.025]
Father Education	0.011 (0.008) [-0.006, 0.027]	0.010 (0.008) [-0.006, 0.026]	0.011 (0.008) [-0.006, 0.027]	0.011 (0.008) [-0.005, 0.028]	0.011 (0.008) [-0.006, 0.027]	0.011 (0.008) [-0.005, 0.028]

**TABLE RCHE\_N4.2C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.003 (0.009) [-0.015, 0.020]	0.002 (0.009) [-0.015, 0.020]	0.003 (0.009) [-0.015, 0.020]	0.002 (0.009) [-0.015, 0.020]	0.002 (0.009) [-0.015, 0.019]	0.003 (0.009) [-0.015, 0.020]
Urban Location	0.012 (0.035) [-0.056, 0.080]	0.007 (0.034) [-0.061, 0.074]	0.011 (0.035) [-0.057, 0.079]	0.010 (0.034) [-0.058, 0.077]	0.005 (0.034) [-0.062, 0.073]	0.010 (0.035) [-0.057, 0.078]
Cognitive Ability (Z-Score)	-0.011 (0.021) [-0.053, 0.031]	-0.013 (0.021) [-0.055, 0.029]	-0.010 (0.022) [-0.053, 0.032]	-0.012 (0.021) [-0.054, 0.030]	-0.015 (0.022) [-0.057, 0.028]	-0.013 (0.022) [-0.056, 0.029]
Locus of Control	0.001 (0.034) [-0.067, 0.068]	0.000 (0.035) [-0.067, 0.068]	0.000 (0.035) [-0.067, 0.068]	0.002 (0.034) [-0.066, 0.069]	0.002 (0.035) [-0.066, 0.070]	0.004 (0.035) [-0.064, 0.072]
Self Concept	0.047 (0.028) [-0.007, 0.102]	0.046 (0.028) [-0.009, 0.100]	0.047 (0.028) [-0.007, 0.102]	0.048 (0.028) [-0.007, 0.102]	0.046 (0.028) [-0.008, 0.101]	0.047 (0.028) [-0.007, 0.101]
Non-Cognitive Ability (EXTERNAL)	0.110 (0.103) [-0.091, 0.312]	0.113 (0.103) [-0.088, 0.314]	0.111 (0.103) [-0.091, 0.313]	0.115 (0.103) [-0.087, 0.317]	0.117 (0.103) [-0.085, 0.319]	0.115 (0.103) [-0.087, 0.317]
Black - not Hispanic	0.015 (0.049) [-0.081, 0.111]	0.011 (0.049) [-0.084, 0.107]	0.015 (0.049) [-0.080, 0.111]	0.015 (0.049) [-0.081, 0.111]	0.012 (0.049) [-0.084, 0.108]	0.016 (0.049) [-0.080, 0.112]
American Indian or Alaska Native	-0.469 (0.472) [-1.394, 0.457]	-0.487 (0.476) [-1.420, 0.446]	-0.472 (0.472) [-1.398, 0.453]	-0.473 (0.471) [-1.397, 0.451]	-0.492 (0.475) [-1.424, 0.440]	-0.487 (0.471) [-1.410, 0.436]
Asian or Pacific Islander	0.112 (0.061) [-0.009, 0.232]	0.100 (0.062) [-0.020, 0.221]	0.112 (0.062) [-0.009, 0.232]	0.109 (0.061) [-0.011, 0.230]	0.098 (0.062) [-0.023, 0.219]	0.110 (0.062) [-0.011, 0.231]
Hispanic or Latino	0.050 (0.056) [-0.060, 0.160]	0.046 (0.056) [-0.063, 0.156]	0.051 (0.056) [-0.059, 0.160]	0.049 (0.056) [-0.061, 0.159]	0.045 (0.056) [-0.065, 0.155]	0.049 (0.056) [-0.061, 0.158]
Full Time Worker	0.958*** (0.057) [0.846, 1.071]	0.959*** (0.057) [0.847, 1.071]	0.959*** (0.057) [0.846, 1.071]	0.958*** (0.057) [0.846, 1.070]	0.958*** (0.057) [0.846, 1.070]	0.959*** (0.057) [0.847, 1.072]
Graduate in 1999 or Student in January 2000	-0.128*** (0.036) [-0.198, -0.057]	-0.129*** (0.036) [-0.199, -0.058]	-0.128*** (0.036) [-0.198, -0.057]	-0.129*** (0.036) [-0.199, -0.058]	-0.130*** (0.036) [-0.200, -0.059]	-0.130*** (0.036) [-0.201, -0.059]
Constant	8.606*** (0.439) [7.744, 9.468]	8.584*** (0.440) [7.720, 9.448]	8.604*** (0.440) [7.742, 9.467]	8.587*** (0.440) [7.723, 9.451]	8.565*** (0.442) [7.699, 9.431]	8.584*** (0.441) [7.719, 9.449]
Observations	1,660	1,660	1,660	1,660	1,660	1,660
Adjusted R-squared	0.266	0.267	0.265	0.266	0.267	0.266

**TABLE RCHE\_N4.2C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.043 (0.065)				
Incremental Effect of College Athletics for FBS Students			0.066 (0.102)			
Incremental Effect of College BB Athletics for Division I Students					-0.090 (0.087)	
Incremental Effect of College BB Athletics for FBS Students						-0.204 (0.106)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RCHE\_N4.2D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.030 (0.048) [-0.064, 0.124]	0.025 (0.048) [-0.069, 0.118]	0.038 (0.050) [-0.060, 0.136]			
College Varsity and High School BB Varsity Athlete				-0.058 (0.073) [-0.202, 0.086]	-0.062 (0.072) [-0.203, 0.079]	-0.016 (0.075) [-0.162, 0.131]
College Varsity Athlete Non BB				0.080 (0.059) [-0.036, 0.196]	0.075 (0.059) [-0.040, 0.191]	0.068 (0.063) [-0.056, 0.191]
College Varsity Athlete × Black	-0.026 (0.132) [-0.284, 0.233]					
College Varsity Athlete × Income Below Poverty Line		0.089 (0.151) [-0.206, 0.385]				
College Varsity Athlete × Single-Parent Household			-0.067 (0.126) [-0.313, 0.179]			
College BB Varsity Athlete × Black				0.056 (0.191) [-0.318, 0.430]		
College BB Varsity Athlete × Income Below Poverty Line					0.222* (0.095) [0.035, 0.408]	
College BB Varsity Athlete × Single-Parent Household						-0.222 (0.188) [-0.590, 0.146]
College Varsity Athlete Non BB × Black				-0.073 (0.171) [-0.408, 0.262]		
College Varsity Athlete Non BB × Income Below Poverty Line					0.015 (0.213) [-0.404, 0.433]	
College Varsity Athlete Non BB × Single-Parent Household						0.077 (0.142) [-0.202, 0.356]
Single-Parent Household	-0.060 (0.040) [-0.139, 0.019]	-0.060 (0.040) [-0.140, 0.019]	-0.055 (0.042) [-0.138, 0.028]	-0.059 (0.040) [-0.138, 0.020]	-0.060 (0.040) [-0.139, 0.019]	-0.055 (0.042) [-0.138, 0.028]
Family Income (\$10K)	0.005 (0.005) [-0.004, 0.014]	0.005 (0.005) [-0.004, 0.014]	0.005 (0.005) [-0.004, 0.014]	0.005 (0.005) [-0.004, 0.014]	0.005 (0.005) [-0.004, 0.014]	0.005 (0.005) [-0.004, 0.014]
Family Income Below Poverty Line	-0.051 (0.060) [-0.168, 0.066]	-0.056 (0.061) [-0.177, 0.064]	-0.050 (0.059) [-0.167, 0.066]	-0.050 (0.060) [-0.167, 0.067]	-0.056 (0.061) [-0.176, 0.065]	-0.050 (0.060) [-0.167, 0.068]
Number of Siblings	-0.002 (0.014) [-0.029, 0.024]	-0.002 (0.014) [-0.029, 0.024]	-0.002 (0.014) [-0.029, 0.024]	-0.002 (0.014) [-0.029, 0.025]	-0.002 (0.014) [-0.028, 0.025]	-0.002 (0.014) [-0.029, 0.025]

**TABLE RCHE\_N4.2D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.011 (0.008) [-0.006, 0.027]	0.011 (0.008) [-0.006, 0.027]	0.011 (0.008) [-0.006, 0.027]	0.011 (0.008) [-0.005, 0.028]	0.011 (0.008) [-0.005, 0.028]	0.011 (0.008) [-0.005, 0.028]
Mother Education	0.003 (0.009) [-0.014, 0.020]	0.003 (0.009) [-0.015, 0.020]	0.002 (0.009) [-0.015, 0.020]	0.002 (0.009) [-0.015, 0.020]	0.002 (0.009) [-0.015, 0.020]	0.002 (0.009) [-0.015, 0.019]
Urban Location	0.012 (0.035) [-0.056, 0.080]	0.011 (0.035) [-0.056, 0.079]	0.012 (0.035) [-0.056, 0.080]	0.010 (0.035) [-0.058, 0.078]	0.009 (0.035) [-0.059, 0.077]	0.009 (0.035) [-0.058, 0.077]
Cognitive Ability (Z-Score)	-0.011 (0.021) [-0.053, 0.031]	-0.011 (0.021) [-0.053, 0.031]	-0.011 (0.021) [-0.053, 0.031]	-0.012 (0.021) [-0.054, 0.030]	-0.012 (0.021) [-0.054, 0.030]	-0.011 (0.021) [-0.053, 0.031]
Locus of Control	0.001 (0.034) [-0.067, 0.068]	0.001 (0.035) [-0.067, 0.069]	-0.000 (0.034) [-0.068, 0.068]	0.002 (0.034) [-0.066, 0.069]	0.002 (0.035) [-0.066, 0.069]	0.001 (0.034) [-0.066, 0.069]
Self Concept	0.047 (0.028) [-0.007, 0.102]	0.047 (0.028) [-0.008, 0.102]	0.048 (0.028) [-0.007, 0.103]	0.048 (0.028) [-0.007, 0.102]	0.048 (0.028) [-0.007, 0.103]	0.048 (0.028) [-0.007, 0.103]
Non-Cognitive Ability (EXTERNAL)	0.111 (0.103) [-0.091, 0.312]	0.110 (0.103) [-0.092, 0.312]	0.111 (0.103) [-0.091, 0.313]	0.115 (0.103) [-0.087, 0.318]	0.115 (0.103) [-0.088, 0.317]	0.112 (0.104) [-0.091, 0.315]
Black - not Hispanic	0.017 (0.051) [-0.083, 0.117]	0.014 (0.049) [-0.082, 0.110]	0.014 (0.049) [-0.081, 0.110]	0.016 (0.051) [-0.084, 0.117]	0.015 (0.049) [-0.081, 0.110]	0.014 (0.049) [-0.082, 0.110]
American Indian or Alaska Native	-0.469 (0.472) [-1.394, 0.457]	-0.469 (0.472) [-1.395, 0.458]	-0.461 (0.475) [-1.392, 0.470]	-0.474 (0.471) [-1.398, 0.451]	-0.474 (0.472) [-1.399, 0.451]	-0.482 (0.473) [-1.410, 0.447]
Asian or Pacific Islander	0.112 (0.062) [-0.009, 0.232]	0.111 (0.062) [-0.010, 0.232]	0.111 (0.062) [-0.009, 0.232]	0.109 (0.062) [-0.012, 0.230]	0.109 (0.062) [-0.012, 0.230]	0.110 (0.062) [-0.011, 0.231]
Hispanic or Latino	0.050 (0.056) [-0.060, 0.160]	0.051 (0.056) [-0.059, 0.161]	0.049 (0.056) [-0.061, 0.159]	0.049 (0.056) [-0.061, 0.159]	0.050 (0.056) [-0.060, 0.161]	0.049 (0.056) [-0.061, 0.159]
Full Time Worker	0.959*** (0.057) [0.846, 1.071]	0.958*** (0.057) [0.846, 1.071]	0.958*** (0.057) [0.846, 1.070]	0.958*** (0.057) [0.846, 1.070]	0.957*** (0.057) [0.845, 1.070]	0.956*** (0.057) [0.844, 1.069]
Graduate in 1999 or Student in January 2000	-0.128*** (0.036) [-0.198, -0.057]	-0.127*** (0.036) [-0.198, -0.057]	-0.128*** (0.036) [-0.198, -0.057]	-0.128*** (0.036) [-0.199, -0.058]	-0.128*** (0.036) [-0.199, -0.058]	-0.128*** (0.036) [-0.199, -0.058]
Constant	8.605*** (0.440) [7.743, 9.468]	8.608*** (0.440) [7.746, 9.471]	8.604*** (0.440) [7.741, 9.467]	8.584*** (0.441) [7.718, 9.449]	8.589*** (0.441) [7.723, 9.454]	8.606*** (0.442) [7.739, 9.474]
Observations	1,660	1,660	1,660	1,660	1,660	1,660
Adjusted R-squared	0.266	0.266	0.266	0.265	0.266	0.266

**TABLE RCHE\_N4.2D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.004 (0.123)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.114 (0.142)				
Incremental Effect of College Athletics for Single-Parent Household			-0.029 (0.115)			
Incremental Effect of College BB Athletics for Blacks				-0.001 (0.177)		
Incremental Effect of College BB Athletics for Income Below Poverty Line					0.160** (0.062)	
Incremental Effect of College BB Athletics for Single-Parent Household						-0.238 (0.173)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.



## TABLE RCHE\_E4.1A: Log Annual Wage

Dependent Variable: Log Annual Income in 2011

Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.124** (0.047) [0.033 , 0.215]	
High School Sophomore BB/FB Varsity Athlete			0.132* (0.052) [0.030 , 0.234]
High School Sophomore Non BB/FB Varsity Athlete			0.115* (0.053) [0.012 , 0.218]
Single-Parent Household	0.048 (0.049) [-0.047 , 0.143]	0.051 (0.049) [-0.044 , 0.147]	0.051 (0.049) [-0.044 , 0.147]
Family Income (\$10K)	0.011* (0.005) [0.002 , 0.020]	0.011* (0.005) [0.002 , 0.019]	0.011* (0.005) [0.002 , 0.019]
Family Income Below Poverty Line	0.141 (0.113) [-0.081 , 0.364]	0.141 (0.113) [-0.081 , 0.363]	0.141 (0.113) [-0.082 , 0.363]
Number of Siblings	0.014 (0.015) [-0.015 , 0.044]	0.014 (0.015) [-0.015 , 0.044]	0.014 (0.015) [-0.015 , 0.043]
Father Education	0.001 (0.009) [-0.017 , 0.018]	0.000 (0.009) [-0.017 , 0.018]	0.000 (0.009) [-0.017 , 0.018]
Mother Education	0.010 (0.011) [-0.011 , 0.031]	0.009 (0.011) [-0.012 , 0.030]	0.009 (0.011) [-0.012 , 0.030]
Urban Location	-0.051 (0.043) [-0.135 , 0.033]	-0.053 (0.043) [-0.137 , 0.031]	-0.052 (0.043) [-0.136 , 0.032]
Cognitive Ability (Z-Score)	0.043 (0.033) [-0.021 , 0.107]	0.047 (0.033) [-0.017 , 0.112]	0.048 (0.033) [-0.016 , 0.112]
Action Control: General Effort and Persistence Scale	0.041 (0.037) [-0.031 , 0.113]	0.044 (0.037) [-0.028 , 0.116]	0.044 (0.037) [-0.028 , 0.116]

## TABLE RCHE\_E4.1A: Log Annual Wage

Dependent Variable: Log Annual Income in 2011

Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006

VARIABLES	(1)	(2)	(3)
Control Expectation Scale	-0.004 (0.031) [-0.064, 0.056]	-0.004 (0.031) [-0.064, 0.056]	-0.004 (0.031) [-0.064, 0.056]
Instrumental Motivation - Utility Interest - Scale	0.041 (0.029) [-0.016, 0.098]	0.033 (0.029) [-0.024, 0.090]	0.033 (0.029) [-0.024, 0.090]
Non-Cognitive Ability (EXTERNAL)	-0.020 (0.080) [-0.176, 0.137]	-0.017 (0.080) [-0.174, 0.139]	-0.016 (0.080) [-0.174, 0.141]
Black - not Hispanic	-0.071 (0.093) [-0.254, 0.111]	-0.064 (0.093) [-0.247, 0.118]	-0.066 (0.094) [-0.250, 0.117]
American Indian or Alaska Native	0.338 (0.554) [-0.749, 1.425]	0.287 (0.558) [-0.807, 1.381]	0.285 (0.562) [-0.817, 1.386]
Asian or Pacific Islander	0.131 (0.071) [-0.008, 0.270]	0.144* (0.072) [0.003, 0.285]	0.146* (0.073) [0.003, 0.288]
Hispanic or Latino	0.023 (0.084) [-0.143, 0.188]	0.028 (0.084) [-0.137, 0.193]	0.028 (0.084) [-0.138, 0.193]
Full Time Worker	0.807*** (0.062) [0.685, 0.929]	0.799*** (0.062) [0.678, 0.920]	0.798*** (0.062) [0.677, 0.920]
Student in 2011	-0.413*** (0.046) [-0.503, -0.324]	-0.413*** (0.046) [-0.503, -0.324]	-0.413*** (0.046) [-0.503, -0.324]
Constant	9.521*** (0.378) [8.779, 10.264]	9.460*** (0.377) [8.722, 10.199]	9.454*** (0.380) [8.708, 10.199]
Observations	1,510	1,510	1,510
Adjusted R-squared	0.230	0.234	0.233

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RCHE\_E4.1B: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.125** (0.048) [0.032, 0.218]	0.127** (0.047) [0.034, 0.220]	0.145** (0.054) [0.039, 0.252]			
HS Sophomore Athlete × Black	-0.015 (0.207) [-0.422, 0.391]					
HS Sophomore Athlete × Income Below Poverty Line		-0.064 (0.227) [-0.510, 0.382]				
HS Sophomore Athlete × Single-Parent Household			-0.084 (0.101) [-0.282, 0.115]			
High School Sophomore BB/FB Varsity Athlete				0.134* (0.053) [0.030, 0.239]	0.136* (0.053) [0.032, 0.241]	0.164** (0.060) [0.047, 0.282]
High School Sophomore Non BB/FB Varsity Athlete				0.116* (0.053) [0.011, 0.221]	0.117* (0.053) [0.012, 0.222]	0.127* (0.061) [0.006, 0.247]
HS Sophomore BB/FB Athlete × Black				-0.026 (0.216) [-0.449, 0.398]		
HS Non BB/FB Varsity Athlete × Black				-0.002 (0.277) [-0.546, 0.541]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					-0.088 (0.240) [-0.558, 0.383]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.018 (0.326) [-0.658, 0.621]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.126 (0.117) [-0.356, 0.104]
HS Non BB/FB Varsity Athlete × Single-Parent Household						-0.036 (0.114) [-0.259, 0.187]
Single-Parent Household	0.051 (0.049) [-0.044, 0.146]	0.051 (0.049) [-0.044, 0.147]	0.107 (0.083) [-0.057, 0.270]	0.051 (0.049) [-0.045, 0.147]	0.051 (0.049) [-0.045, 0.147]	0.107 (0.083) [-0.057, 0.271]
Family Income (\$10K)	0.011* (0.005) [0.002, 0.019]	0.010* (0.005) [0.002, 0.019]	0.010* (0.005) [0.002, 0.019]	0.011* (0.005) [0.002, 0.019]	0.011* (0.005) [0.002, 0.019]	0.010* (0.005) [0.001, 0.019]
Family Income Below Poverty Line	0.140 (0.113) [-0.082, 0.363]	0.180 (0.185) [-0.182, 0.542]	0.139 (0.113) [-0.083, 0.361]	0.140 (0.113) [-0.082, 0.362]	0.181 (0.185) [-0.181, 0.543]	0.140 (0.114) [-0.083, 0.363]
Number of Siblings	0.014 (0.015) [-0.015, 0.044]	0.014 (0.015) [-0.015, 0.044]	0.014 (0.015) [-0.015, 0.044]	0.014 (0.015) [-0.015, 0.043]	0.014 (0.015) [-0.015, 0.043]	0.014 (0.015) [-0.015, 0.044]

**TABLE RCHE\_E4.1B: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.000 (0.009) [-0.017, 0.018]	0.000 (0.009) [-0.017, 0.018]	0.000 (0.009) [-0.017, 0.017]	0.000 (0.009) [-0.017, 0.018]	0.000 (0.009) [-0.017, 0.018]	0.000 (0.009) [-0.017, 0.017]
Mother Education	0.009 (0.011) [-0.012, 0.030]	0.009 (0.011) [-0.012, 0.030]	0.009 (0.011) [-0.012, 0.031]	0.009 (0.011) [-0.012, 0.031]	0.009 (0.011) [-0.012, 0.030]	0.010 (0.011) [-0.012, 0.031]
Urban Location	-0.053 (0.042) [-0.136, 0.030]	-0.053 (0.043) [-0.137, 0.030]	-0.054 (0.043) [-0.137, 0.030]	-0.052 (0.043) [-0.136, 0.032]	-0.053 (0.043) [-0.137, 0.031]	-0.053 (0.043) [-0.137, 0.031]
Cognitive Ability (Z-Score)	0.047 (0.033) [-0.017, 0.112]	0.047 (0.033) [-0.017, 0.112]	0.047 (0.033) [-0.017, 0.112]	0.048 (0.033) [-0.017, 0.112]	0.047 (0.033) [-0.018, 0.112]	0.049 (0.033) [-0.016, 0.113]
Action Control: General Effort and Persistence Scale	0.044 (0.037) [-0.028, 0.116]	0.044 (0.037) [-0.028, 0.116]	0.043 (0.037) [-0.029, 0.115]	0.044 (0.037) [-0.028, 0.116]	0.043 (0.037) [-0.029, 0.115]	0.043 (0.037) [-0.029, 0.115]
Control Expectation Scale	-0.004 (0.031) [-0.064, 0.056]	-0.004 (0.031) [-0.064, 0.056]	-0.004 (0.031) [-0.064, 0.056]	-0.004 (0.031) [-0.064, 0.056]	-0.003 (0.031) [-0.063, 0.056]	-0.003 (0.030) [-0.063, 0.057]
Instrumental Motivation - Utility Interest - Scale	0.033 (0.029) [-0.024, 0.090]	0.033 (0.029) [-0.024, 0.090]	0.034 (0.029) [-0.023, 0.091]	0.033 (0.029) [-0.024, 0.090]	0.033 (0.029) [-0.024, 0.090]	0.033 (0.029) [-0.024, 0.090]
Non-Cognitive Ability (EXTERNAL)	-0.018 (0.080) [-0.174, 0.139]	-0.017 (0.080) [-0.174, 0.140]	-0.016 (0.080) [-0.173, 0.141]	-0.017 (0.080) [-0.174, 0.141]	-0.016 (0.080) [-0.173, 0.142]	-0.013 (0.080) [-0.170, 0.144]
Black - not Hispanic	-0.054 (0.178) [-0.402, 0.294]	-0.066 (0.093) [-0.248, 0.117]	-0.066 (0.093) [-0.248, 0.117]	-0.053 (0.178) [-0.402, 0.295]	-0.068 (0.093) [-0.251, 0.115]	-0.065 (0.094) [-0.249, 0.119]
American Indian or Alaska Native	0.286 (0.558) [-0.808, 1.381]	0.285 (0.558) [-0.810, 1.380]	0.300 (0.552) [-0.784, 1.383]	0.284 (0.563) [-0.820, 1.387]	0.282 (0.563) [-0.822, 1.386]	0.320 (0.553) [-0.765, 1.404]
Asian or Pacific Islander	0.144* (0.072) [0.003, 0.286]	0.143* (0.072) [0.001, 0.284]	0.143* (0.072) [0.002, 0.285]	0.146* (0.073) [0.003, 0.289]	0.144* (0.073) [0.002, 0.287]	0.147* (0.073) [0.004, 0.290]
Hispanic or Latino	0.028 (0.084) [-0.137, 0.194]	0.029 (0.084) [-0.137, 0.194]	0.032 (0.084) [-0.133, 0.197]	0.028 (0.084) [-0.138, 0.193]	0.029 (0.084) [-0.137, 0.194]	0.030 (0.084) [-0.135, 0.196]
Full Time Worker	0.799*** (0.062) [0.678, 0.920]	0.799*** (0.062) [0.678, 0.920]	0.799*** (0.062) [0.678, 0.920]	0.798*** (0.062) [0.677, 0.919]	0.798*** (0.062) [0.677, 0.920]	0.797*** (0.062) [0.676, 0.919]
Student in 2011	-0.413*** (0.046) [-0.503, -0.323]	-0.413*** (0.046) [-0.503, -0.323]	-0.413*** (0.046) [-0.503, -0.323]	-0.413*** (0.046) [-0.503, -0.323]	-0.413*** (0.046) [-0.504, -0.323]	-0.412*** (0.046) [-0.501, -0.322]
Constant	9.460*** (0.378) [8.719, 10.201]	9.454*** (0.378) [8.713, 10.196]	9.439*** (0.379) [8.695, 10.182]	9.454*** (0.381) [8.705, 10.202]	9.449*** (0.381) [8.702, 10.195]	9.424*** (0.382) [8.675, 10.173]
Observations	1,510	1,510	1,510	1,510	1,510	1,510
Adjusted R-squared	0.233	0.233	0.234	0.232	0.233	0.233

**TABLE RCHE\_E4.1B: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.110 (0.202)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.063 (0.223)				
Incremental Effect of HS Athletics for Single-Parent Household			0.061 (0.087)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.108 (0.209)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.049 (0.235)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.038 (0.102)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RCHE\_E4.1C: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.067 (0.052) [-0.035, 0.170]	0.050 (0.075) [-0.098, 0.197]	0.077 (0.060) [-0.042, 0.195]			
College Varsity and High School BB/FB Varsity Athlete				0.078 (0.069) [-0.058, 0.214]	0.032 (0.096) [-0.157, 0.221]	0.076 (0.080) [-0.081, 0.233]
College Varsity Athlete Non BB/FB				0.056 (0.070) [-0.080, 0.193]	0.071 (0.106) [-0.137, 0.279]	0.078 (0.081) [-0.082, 0.237]
College Varsity Athlete × Division 1		0.058 (0.099) [-0.135, 0.251]				
College Varsity Athlete × FBS			-0.012 (0.115) [-0.238, 0.213]			
College BB/FB Varsity Athlete × Division 1					0.142 (0.134) [-0.121, 0.405]	
College BB/FB Varsity Athlete × FBS						0.055 (0.156) [-0.251, 0.362]
College Varsity Athlete Non BB/FB × Division 1					-0.020 (0.135) [-0.285, 0.245]	
College Varsity Athlete Non BB/FB × FBS						-0.066 (0.155) [-0.370, 0.238]
NCAA Division 1		0.035 (0.046) [-0.055, 0.125]			0.034 (0.046) [-0.055, 0.124]	
NCAA FBS			0.046 (0.049) [-0.050, 0.142]			0.046 (0.049) [-0.050, 0.142]
Single-Parent Household	0.048 (0.049) [-0.047, 0.144]	0.049 (0.048) [-0.046, 0.144]	0.048 (0.049) [-0.047, 0.143]	0.048 (0.048) [-0.047, 0.143]	0.051 (0.048) [-0.044, 0.145]	0.049 (0.048) [-0.046, 0.144]
Family Income (\$10K)	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]
Family Income Below Poverty Line	0.144 (0.113) [-0.079, 0.366]	0.145 (0.113) [-0.077, 0.366]	0.145 (0.113) [-0.077, 0.367]	0.146 (0.113) [-0.076, 0.367]	0.149 (0.113) [-0.072, 0.370]	0.147 (0.113) [-0.074, 0.369]
Number of Siblings	0.014 (0.015) [-0.015, 0.044]	0.014 (0.015) [-0.016, 0.043]	0.014 (0.015) [-0.015, 0.044]	0.014 (0.015) [-0.015, 0.044]	0.013 (0.015) [-0.017, 0.042]	0.014 (0.015) [-0.015, 0.044]
Father Education	0.000 (0.009) [-0.017, 0.017]	-0.000 (0.009) [-0.018, 0.017]	-0.000 (0.009) [-0.018, 0.017]	0.000 (0.009) [-0.017, 0.017]	-0.001 (0.009) [-0.018, 0.017]	-0.000 (0.009) [-0.018, 0.017]

**TABLE RCHE\_E4.1C: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.010 (0.011) [-0.012, 0.031]	0.009 (0.011) [-0.012, 0.031]	0.009 (0.011) [-0.012, 0.031]	0.010 (0.011) [-0.012, 0.031]	0.009 (0.011) [-0.012, 0.031]	0.009 (0.011) [-0.012, 0.031]
Urban Location	-0.050 (0.043) [-0.134, 0.033]	-0.051 (0.043) [-0.135, 0.033]	-0.052 (0.043) [-0.136, 0.031]	-0.051 (0.043) [-0.135, 0.033]	-0.054 (0.043) [-0.138, 0.030]	-0.054 (0.043) [-0.138, 0.030]
Cognitive Ability (Z-Score)	0.045 (0.033) [-0.019, 0.110]	0.041 (0.033) [-0.024, 0.105]	0.041 (0.033) [-0.025, 0.106]	0.046 (0.033) [-0.019, 0.110]	0.042 (0.033) [-0.023, 0.106]	0.041 (0.033) [-0.024, 0.107]
Action Control: General Effort and Persistence Scale	0.039 (0.036) [-0.032, 0.111]	0.039 (0.036) [-0.032, 0.111]	0.040 (0.037) [-0.032, 0.112]	0.039 (0.037) [-0.033, 0.111]	0.039 (0.037) [-0.033, 0.111]	0.040 (0.037) [-0.032, 0.112]
Control Expectation Scale	-0.004 (0.031) [-0.064, 0.056]	-0.007 (0.031) [-0.067, 0.054]	-0.005 (0.030) [-0.065, 0.054]	-0.004 (0.031) [-0.064, 0.056]	-0.006 (0.031) [-0.066, 0.054]	-0.005 (0.031) [-0.065, 0.055]
Instrumental Motivation - Utility Interest - Scale	0.041 (0.029) [-0.016, 0.098]	0.042 (0.029) [-0.015, 0.099]	0.041 (0.029) [-0.016, 0.098]	0.042 (0.029) [-0.015, 0.098]	0.041 (0.029) [-0.016, 0.098]	0.040 (0.029) [-0.017, 0.097]
Non-Cognitive Ability (EXTERNAL)	-0.023 (0.081) [-0.181, 0.135]	-0.028 (0.081) [-0.186, 0.130]	-0.025 (0.080) [-0.182, 0.132]	-0.023 (0.081) [-0.182, 0.136]	-0.028 (0.081) [-0.188, 0.131]	-0.026 (0.081) [-0.184, 0.133]
Black - not Hispanic	-0.078 (0.093) [-0.261, 0.105]	-0.089 (0.094) [-0.274, 0.096]	-0.079 (0.093) [-0.262, 0.104]	-0.079 (0.094) [-0.262, 0.105]	-0.090 (0.095) [-0.276, 0.095]	-0.079 (0.094) [-0.263, 0.105]
American Indian or Alaska Native	0.326 (0.539) [-0.732, 1.384]	0.347 (0.545) [-0.721, 1.416]	0.335 (0.539) [-0.723, 1.392]	0.330 (0.542) [-0.732, 1.393]	0.343 (0.542) [-0.720, 1.405]	0.335 (0.540) [-0.723, 1.394]
Asian or Pacific Islander	0.132 (0.071) [-0.007, 0.271]	0.128 (0.071) [-0.011, 0.266]	0.130 (0.071) [-0.009, 0.270]	0.133 (0.071) [-0.007, 0.273]	0.130 (0.071) [-0.009, 0.270]	0.133 (0.071) [-0.007, 0.273]
Hispanic or Latino	0.021 (0.084) [-0.145, 0.186]	0.020 (0.085) [-0.146, 0.186]	0.021 (0.085) [-0.145, 0.187]	0.021 (0.085) [-0.145, 0.188]	0.017 (0.086) [-0.151, 0.185]	0.018 (0.086) [-0.150, 0.187]
Full Time Worker	0.804*** (0.062) [0.682, 0.926]	0.806*** (0.062) [0.684, 0.928]	0.805*** (0.062) [0.683, 0.927]	0.804*** (0.062) [0.682, 0.926]	0.808*** (0.062) [0.685, 0.930]	0.805*** (0.062) [0.682, 0.927]
Student in 2011	-0.413*** (0.046) [-0.503, -0.323]	-0.413*** (0.046) [-0.503, -0.323]	-0.413*** (0.046) [-0.503, -0.324]	-0.413*** (0.046) [-0.503, -0.323]	-0.414*** (0.046) [-0.504, -0.324]	-0.414*** (0.046) [-0.504, -0.324]
Constant	9.538*** (0.383) [8.786, 10.289]	9.554*** (0.382) [8.805, 10.304]	9.545*** (0.382) [8.796, 10.294]	9.536*** (0.384) [8.782, 10.289]	9.558*** (0.386) [8.801, 10.316]	9.549*** (0.385) [8.793, 10.304]
Observations	1,510	1,510	1,510	1,510	1,510	1,510
Adjusted R-squared	0.231	0.231	0.230	0.230	0.230	0.229

**TABLE RCHE\_E4.1C: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.107 (0.067)				
Incremental Effect of College Athletics for FBS Students			0.064 (0.099)			
Incremental Effect of College BB/FB Athletics for Division I Students					0.174 (0.094)	
Incremental Effect of College BB/FB Athletics for FBS Students						0.131 (0.133)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.



**TABLE RCHE\_E4.1D: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.064 (0.054) [-0.042, 0.171]	0.075 (0.053) [-0.029, 0.178]	0.092 (0.057) [-0.020, 0.203]			
College Varsity and High School BB/FB Varsity Athlete				0.101 (0.073) [-0.043, 0.245]	0.082 (0.070) [-0.055, 0.220]	0.124 (0.071) [-0.015, 0.262]
College Varsity Athlete Non BB/FB				0.030 (0.071) [-0.110, 0.170]	0.066 (0.071) [-0.073, 0.206]	0.062 (0.080) [-0.095, 0.219]
College Varsity Athlete × Black	0.032 (0.193) [-0.346, 0.410]					
College Varsity Athlete × Income Below Poverty Line		-0.200 (0.295) [-0.779, 0.379]				
College Varsity Athlete × Single-Parent Household			-0.104 (0.130) [-0.360, 0.151]			
College BB/FB Varsity Athlete × Black				-0.155 (0.220) [-0.588, 0.277]		
College BB/FB Varsity Athlete × Income Below Poverty Line					-0.192 (0.516) [-1.205, 0.821]	
College BB/FB Varsity Athlete × Single-Parent Household						-0.172 (0.183) [-0.530, 0.187]
College Varsity Athlete Non BB/FB × Black				0.465 (0.274) [-0.073, 1.003]		
College Varsity Athlete Non BB/FB × Income Below Poverty Line					-0.198 (0.343) [-0.871, 0.475]	
College Varsity Athlete Non BB/FB × Single-Parent Household						-0.020 (0.152) [-0.319, 0.278]
Single-Parent Household	0.049 (0.048) [-0.046, 0.144]	0.049 (0.049) [-0.047, 0.144]	0.070 (0.051) [-0.030, 0.170]	0.049 (0.048) [-0.046, 0.143]	0.048 (0.048) [-0.047, 0.144]	0.070 (0.051) [-0.030, 0.170]
Family Income (\$10K)	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]
Family Income Below Poverty Line	0.145 (0.113) [-0.076, 0.366]	0.179 (0.122) [-0.060, 0.417]	0.143 (0.113) [-0.079, 0.364]	0.136 (0.113) [-0.085, 0.357]	0.179 (0.122) [-0.059, 0.418]	0.140 (0.112) [-0.080, 0.360]
Number of Siblings	0.014 (0.015) [-0.015, 0.044]	0.014 (0.015) [-0.015, 0.044]	0.014 (0.015) [-0.015, 0.044]	0.013 (0.015) [-0.016, 0.043]	0.014 (0.015) [-0.015, 0.044]	0.014 (0.015) [-0.015, 0.044]

**TABLE RCHE\_E4.1D: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.000 (0.009) [-0.017, 0.017]	0.000 (0.009) [-0.017, 0.018]	-0.000 (0.009) [-0.017, 0.017]	-0.000 (0.009) [-0.018, 0.017]	0.000 (0.009) [-0.017, 0.018]	-0.000 (0.009) [-0.017, 0.017]
Mother Education	0.010 (0.011) [-0.012, 0.031]	0.010 (0.011) [-0.011, 0.031]	0.010 (0.011) [-0.011, 0.032]	0.010 (0.011) [-0.011, 0.031]	0.010 (0.011) [-0.011, 0.031]	0.010 (0.011) [-0.011, 0.031]
Urban Location	-0.050 (0.043) [-0.134, 0.033]	-0.050 (0.043) [-0.133, 0.034]	-0.049 (0.043) [-0.133, 0.034]	-0.049 (0.043) [-0.133, 0.035]	-0.050 (0.043) [-0.134, 0.034]	-0.050 (0.043) [-0.134, 0.034]
Cognitive Ability (Z-Score)	0.045 (0.033) [-0.019, 0.110]	0.045 (0.033) [-0.019, 0.110]	0.045 (0.033) [-0.019, 0.110]	0.043 (0.033) [-0.021, 0.108]	0.045 (0.033) [-0.019, 0.110]	0.046 (0.033) [-0.018, 0.110]
Action Control: General Effort and Persistence Scale	0.039 (0.036) [-0.032, 0.111]	0.038 (0.036) [-0.034, 0.109]	0.038 (0.036) [-0.033, 0.110]	0.043 (0.037) [-0.029, 0.115]	0.038 (0.037) [-0.034, 0.109]	0.037 (0.036) [-0.034, 0.109]
Control Expectation Scale	-0.004 (0.031) [-0.064, 0.056]	-0.004 (0.031) [-0.064, 0.056]	-0.004 (0.031) [-0.064, 0.056]	-0.005 (0.031) [-0.064, 0.055]	-0.004 (0.031) [-0.064, 0.056]	-0.003 (0.031) [-0.063, 0.057]
Instrumental Motivation - Utility Interest - Scale	0.041 (0.029) [-0.015, 0.098]	0.042 (0.029) [-0.015, 0.099]	0.042 (0.029) [-0.015, 0.099]	0.040 (0.029) [-0.016, 0.097]	0.043 (0.029) [-0.014, 0.100]	0.042 (0.029) [-0.015, 0.099]
Non-Cognitive Ability (EXTERNAL)	-0.023 (0.081) [-0.182, 0.135]	-0.023 (0.081) [-0.182, 0.135]	-0.022 (0.081) [-0.180, 0.137]	-0.028 (0.081) [-0.187, 0.131]	-0.023 (0.081) [-0.182, 0.136]	-0.020 (0.081) [-0.179, 0.138]
Black - not Hispanic	-0.088 (0.112) [-0.306, 0.131]	-0.080 (0.093) [-0.262, 0.103]	-0.077 (0.093) [-0.260, 0.106]	-0.087 (0.111) [-0.306, 0.132]	-0.080 (0.093) [-0.263, 0.103]	-0.078 (0.094) [-0.262, 0.106]
American Indian or Alaska Native	0.327 (0.540) [-0.733, 1.386]	0.324 (0.538) [-0.730, 1.379]	0.307 (0.539) [-0.750, 1.365]	0.337 (0.547) [-0.736, 1.410]	0.328 (0.540) [-0.731, 1.387]	0.316 (0.546) [-0.755, 1.387]
Asian or Pacific Islander	0.132 (0.071) [-0.008, 0.271]	0.135 (0.070) [-0.004, 0.273]	0.133 (0.071) [-0.006, 0.272]	0.136 (0.071) [-0.004, 0.276]	0.135 (0.071) [-0.003, 0.274]	0.134 (0.071) [-0.005, 0.274]
Hispanic or Latino	0.021 (0.084) [-0.145, 0.186]	0.019 (0.084) [-0.146, 0.185]	0.021 (0.084) [-0.144, 0.186]	0.021 (0.085) [-0.146, 0.188]	0.020 (0.085) [-0.147, 0.187]	0.019 (0.085) [-0.148, 0.186]
Full Time Worker	0.805*** (0.062) [0.683, 0.926]	0.803*** (0.062) [0.681, 0.925]	0.802*** (0.062) [0.679, 0.924]	0.800*** (0.062) [0.678, 0.921]	0.803*** (0.062) [0.681, 0.926]	0.802*** (0.062) [0.679, 0.924]
Student in 2011	-0.412*** (0.046) [-0.503, -0.322]	-0.412*** (0.046) [-0.502, -0.322]	-0.413*** (0.046) [-0.502, -0.323]	-0.411*** (0.046) [-0.501, -0.321]	-0.412*** (0.046) [-0.502, -0.322]	-0.411*** (0.046) [-0.501, -0.322]
Constant	9.537*** (0.383) [8.785, 10.289]	9.532*** (0.383) [8.782, 10.283]	9.523*** (0.383) [8.773, 10.274]	9.563*** (0.385) [8.808, 10.319]	9.531*** (0.383) [8.778, 10.283]	9.520*** (0.384) [8.768, 10.273]
Observations	1,510	1,510	1,510	1,510	1,510	1,510
Adjusted R-squared	0.230	0.231	0.231	0.231	0.230	0.230

**TABLE RCHE\_E4.1D: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Male; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.096 (0.185)					
Incremental Effect of College Athletics for Income Below Poverty Line		-0.125 (0.291)				
Incremental Effect of College Athletics for Single-Parent Household			-0.013 (0.119)			
Incremental Effect of College BB/FB Athletics for Blacks				-0.055 (0.208)		
Incremental Effect of College BB/FB Athletics for Income Below Poverty Line					-0.109 (0.512)	
Incremental Effect of College BB/FB Athletics for Single-Parent Household						-0.048 (0.170)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

## TABLE RCHE\_E4.2A: Log Annual Wage

Dependent Variable: Log Annual Income in 2011

Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.111** (0.042) [0.029, 0.194]	
High School Sophomore BB Varsity Athlete			0.171** (0.062) [0.049, 0.293]
High School Sophomore Non BB Varsity Athlete			0.096* (0.043) [0.011, 0.181]
Single-Parent Household	-0.018 (0.049) [-0.113, 0.077]	-0.011 (0.048) [-0.105, 0.083]	-0.009 (0.048) [-0.104, 0.085]
Family Income (\$10K)	0.012* (0.005) [0.003, 0.021]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.021]
Family Income Below Poverty Line	-0.013 (0.088) [-0.184, 0.159]	-0.002 (0.088) [-0.174, 0.171]	0.004 (0.088) [-0.168, 0.176]
Number of Siblings	-0.031* (0.015) [-0.061, -0.002]	-0.032* (0.015) [-0.061, -0.003]	-0.033* (0.015) [-0.062, -0.004]
Father Education	-0.013 (0.009) [-0.031, 0.004]	-0.013 (0.009) [-0.031, 0.004]	-0.013 (0.009) [-0.031, 0.004]
Mother Education	-0.006 (0.010) [-0.026, 0.014]	-0.007 (0.010) [-0.027, 0.013]	-0.007 (0.010) [-0.027, 0.013]
Urban Location	0.014 (0.042) [-0.068, 0.097]	0.018 (0.042) [-0.064, 0.101]	0.021 (0.042) [-0.062, 0.104]
Cognitive Ability (Z-Score)	0.126*** (0.029) [0.070, 0.182]	0.127*** (0.029) [0.071, 0.184]	0.130*** (0.029) [0.074, 0.186]
Action Control: General Effort and Persistence Scale	-0.003 (0.031) [-0.065, 0.058]	-0.000 (0.031) [-0.062, 0.061]	0.001 (0.031) [-0.061, 0.062]

## TABLE RCHE\_E4.2A: Log Annual Wage

Dependent Variable: Log Annual Income in 2011

Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006

VARIABLES	(1)	(2)	(3)
Control Expectation Scale	0.046 (0.032) [-0.017, 0.109]	0.041 (0.032) [-0.022, 0.104]	0.040 (0.032) [-0.024, 0.103]
Instrumental Motivation - Utility Interest - Scale	0.011 (0.025) [-0.038, 0.061]	0.010 (0.025) [-0.039, 0.059]	0.011 (0.025) [-0.039, 0.060]
Non-Cognitive Ability (EXTERNAL)	0.029 (0.090) [-0.148, 0.205]	0.031 (0.090) [-0.145, 0.208]	0.030 (0.090) [-0.147, 0.206]
Black - not Hispanic	-0.085 (0.078) [-0.239, 0.069]	-0.072 (0.079) [-0.226, 0.083]	-0.073 (0.079) [-0.227, 0.081]
American Indian or Alaska Native	-0.393 (0.236) [-0.856, 0.070]	-0.393 (0.237) [-0.858, 0.072]	-0.406 (0.234) [-0.864, 0.053]
Asian or Pacific Islander	0.163* (0.076) [0.015, 0.312]	0.181* (0.077) [0.030, 0.332]	0.184* (0.077) [0.033, 0.335]
Hispanic or Latino	-0.004 (0.071) [-0.143, 0.135]	0.009 (0.071) [-0.130, 0.148]	0.012 (0.071) [-0.127, 0.150]
Full Time Worker	0.861*** (0.056) [0.752, 0.970]	0.857*** (0.056) [0.748, 0.965]	0.856*** (0.055) [0.747, 0.964]
Student in 2011	-0.289*** (0.040) [-0.367, -0.211]	-0.291*** (0.040) [-0.369, -0.213]	-0.292*** (0.040) [-0.370, -0.214]
Constant	9.589*** (0.390) [8.824, 10.355]	9.527*** (0.393) [8.757, 10.297]	9.530*** (0.392) [8.762, 10.298]
Observations	2,020	2,020	2,020
Adjusted R-squared	0.219	0.222	0.222

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RCHE\_E4.2B: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.101* (0.044) [0.015, 0.187]	0.118** (0.044) [0.032, 0.203]	0.047 (0.046) [-0.043, 0.137]			
HS Sophomore Athlete × Black	0.105 (0.152) [-0.194, 0.404]					
HS Sophomore Athlete × Income Below Poverty Line		-0.083 (0.161) [-0.398, 0.232]				
HS Sophomore Athlete × Single-Parent Household			0.215* (0.094) [0.030, 0.400]			
High School Sophomore BB Varsity Athlete				0.130* (0.065) [0.003, 0.257]	0.170** (0.064) [0.045, 0.296]	0.095 (0.070) [-0.042, 0.233]
High School Sophomore Non BB Varsity Athlete				0.095* (0.045) [0.007, 0.184]	0.104* (0.045) [0.016, 0.192]	0.034 (0.048) [-0.059, 0.127]
HS Sophomore BB Athlete × Black				0.435* (0.213) [0.018, 0.853]		
HS Non BB Varsity Athlete × Black				-0.030 (0.167) [-0.358, 0.298]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.119 (0.180) [-0.234, 0.473]	
HS Non BB Varsity Athlete × Income Below Poverty Line					-0.112 (0.172) [-0.448, 0.225]	
HS Sophomore BB Athlete × Single-Parent Household						0.263 (0.137) [-0.006, 0.533]
HS Non BB Varsity Athlete × Single-Parent Household						0.203* (0.098) [0.011, 0.395]
Single-Parent Household	-0.011 (0.048) [-0.106, 0.083]	-0.011 (0.048) [-0.105, 0.083]	-0.141 (0.082) [-0.302, 0.020]	-0.007 (0.048) [-0.101, 0.087]	-0.011 (0.048) [-0.105, 0.084]	-0.140 (0.082) [-0.301, 0.022]
Family Income (\$10K)	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.012* (0.005) [0.002, 0.021]
Family Income Below Poverty Line	0.001 (0.087) [-0.171, 0.172]	0.036 (0.122) [-0.203, 0.274]	0.007 (0.087) [-0.164, 0.178]	0.014 (0.087) [-0.157, 0.185]	0.038 (0.122) [-0.201, 0.277]	0.013 (0.087) [-0.158, 0.183]
Number of Siblings	-0.032* (0.015) [-0.061, -0.003]	-0.032* (0.015) [-0.061, -0.003]	-0.033* (0.015) [-0.062, -0.004]	-0.034* (0.015) [-0.064, -0.005]	-0.033* (0.015) [-0.062, -0.004]	-0.035* (0.015) [-0.064, -0.006]

**TABLE RCHE\_E4.2B: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	-0.014 (0.009) [-0.031, 0.004]	-0.014 (0.009) [-0.031, 0.004]	-0.014 (0.009) [-0.031, 0.004]	-0.014 (0.009) [-0.031, 0.003]	-0.014 (0.009) [-0.031, 0.004]	-0.013 (0.009) [-0.031, 0.004]
Mother Education	-0.007 (0.010) [-0.027, 0.013]	-0.007 (0.010) [-0.027, 0.013]	-0.007 (0.010) [-0.027, 0.013]	-0.007 (0.010) [-0.027, 0.013]	-0.007 (0.010) [-0.027, 0.013]	-0.007 (0.010) [-0.027, 0.013]
Urban Location	0.017 (0.042) [-0.065, 0.100]	0.018 (0.042) [-0.064, 0.101]	0.017 (0.042) [-0.065, 0.100]	0.024 (0.043) [-0.060, 0.107]	0.022 (0.042) [-0.061, 0.105]	0.020 (0.042) [-0.063, 0.104]
Cognitive Ability (Z-Score)	0.127*** (0.029) [0.070, 0.183]	0.127*** (0.029) [0.071, 0.184]	0.125*** (0.029) [0.068, 0.181]	0.129*** (0.029) [0.073, 0.185]	0.130*** (0.029) [0.074, 0.186]	0.127*** (0.029) [0.071, 0.183]
Action Control: General Effort and Persistence Scale	0.000 (0.031) [-0.061, 0.061]	-0.001 (0.031) [-0.062, 0.060]	0.002 (0.031) [-0.060, 0.063]	0.003 (0.031) [-0.058, 0.064]	0.000 (0.031) [-0.061, 0.061]	0.003 (0.031) [-0.059, 0.064]
Control Expectation Scale	0.041 (0.032) [-0.023, 0.104]	0.041 (0.032) [-0.023, 0.104]	0.040 (0.032) [-0.023, 0.104]	0.039 (0.032) [-0.025, 0.102]	0.040 (0.032) [-0.024, 0.103]	0.039 (0.032) [-0.024, 0.103]
Instrumental Motivation - Utility Interest - Scale	0.011 (0.025) [-0.038, 0.060]	0.010 (0.025) [-0.039, 0.060]	0.010 (0.025) [-0.039, 0.059]	0.010 (0.025) [-0.039, 0.060]	0.010 (0.025) [-0.039, 0.059]	0.010 (0.025) [-0.039, 0.059]
Non-Cognitive Ability (EXTERNAL)	0.034 (0.091) [-0.144, 0.213]	0.031 (0.090) [-0.146, 0.208]	0.028 (0.090) [-0.148, 0.204]	0.024 (0.089) [-0.151, 0.200]	0.029 (0.090) [-0.148, 0.206]	0.025 (0.090) [-0.151, 0.201]
Black - not Hispanic	-0.128 (0.111) [-0.346, 0.090]	-0.072 (0.079) [-0.227, 0.083]	-0.072 (0.079) [-0.227, 0.083]	-0.129 (0.111) [-0.347, 0.089]	-0.071 (0.079) [-0.226, 0.084]	-0.073 (0.079) [-0.227, 0.082]
American Indian or Alaska Native	-0.394 (0.237) [-0.859, 0.072]	-0.389 (0.237) [-0.854, 0.075]	-0.400 (0.242) [-0.875, 0.075]	-0.402 (0.236) [-0.864, 0.061]	-0.413 (0.232) [-0.867, 0.042]	-0.415 (0.237) [-0.880, 0.051]
Asian or Pacific Islander	0.179* (0.077) [0.028, 0.330]	0.181* (0.077) [0.030, 0.331]	0.178* (0.077) [0.027, 0.329]	0.179* (0.077) [0.028, 0.330]	0.185* (0.077) [0.033, 0.336]	0.181* (0.077) [0.030, 0.332]
Hispanic or Latino	0.007 (0.071) [-0.132, 0.146]	0.008 (0.071) [-0.132, 0.147]	0.008 (0.071) [-0.131, 0.147]	0.007 (0.071) [-0.132, 0.146]	0.012 (0.071) [-0.127, 0.151]	0.011 (0.071) [-0.128, 0.149]
Full Time Worker	0.857*** (0.056) [0.748, 0.965]	0.857*** (0.056) [0.748, 0.966]	0.859*** (0.055) [0.751, 0.968]	0.860*** (0.055) [0.751, 0.969]	0.855*** (0.056) [0.746, 0.964]	0.858*** (0.056) [0.749, 0.967]
Student in 2011	-0.291*** (0.040) [-0.369, -0.213]	-0.291*** (0.040) [-0.369, -0.213]	-0.293*** (0.040) [-0.371, -0.214]	-0.292*** (0.040) [-0.370, -0.214]	-0.290*** (0.040) [-0.368, -0.212]	-0.294*** (0.040) [-0.372, -0.216]
Constant	9.522*** (0.395) [8.748, 10.296]	9.522*** (0.393) [8.752, 10.292]	9.584*** (0.388) [8.824, 10.344]	9.563*** (0.389) [8.800, 10.326]	9.534*** (0.393) [8.763, 10.304]	9.592*** (0.388) [8.831, 10.353]
Observations	2,020	2,020	2,020	2,020	2,020	2,020
Adjusted R-squared	0.222	0.222	0.224	0.224	0.222	0.224

**TABLE RCHE\_E4.2B: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.206 (0.146)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.035 (0.155)				
Incremental Effect of HS Athletics for Single-Parent Household			0.262** (0.085)			
Incremental Effect of HS BB Athletics for Blacks				0.565** (0.203)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.290 (0.171)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.359** (0.121)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.



**TABLE RCHE\_E4.2C: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.129* (0.057) [0.018, 0.240]	0.165* (0.066) [0.036, 0.294]	0.161** (0.060) [0.044, 0.278]			
College Varsity and High School BB Varsity Athlete				0.196* (0.095) [0.010, 0.383]	0.201 (0.107) [-0.010, 0.411]	0.252** (0.096) [0.064, 0.441]
College Varsity Athlete Non BB				0.102 (0.067) [-0.030, 0.233]	0.141 (0.075) [-0.007, 0.288]	0.117 (0.070) [-0.020, 0.254]
College Varsity Athlete × Division 1		-0.075 (0.113) [-0.296, 0.146]				
College Varsity Athlete × FBS			-0.122 (0.156) [-0.427, 0.183]			
College BB Varsity Athlete × Division 1					-0.024 (0.221) [-0.458, 0.410]	
College BB Varsity Athlete × FBS						-0.340 (0.328) [-0.983, 0.304]
College Varsity Athlete Non BB × Division 1					-0.069 (0.126) [-0.316, 0.178]	
College Varsity Athlete Non BB × FBS						-0.050 (0.174) [-0.390, 0.291]
NCAA Division 1		-0.013 (0.041) [-0.093, 0.068]			-0.013 (0.041) [-0.094, 0.067]	
NCAA FBS			0.018 (0.041) [-0.062, 0.099]			0.018 (0.041) [-0.063, 0.098]
Single-Parent Household	-0.016 (0.049) [-0.111, 0.080]	-0.016 (0.049) [-0.111, 0.080]	-0.015 (0.049) [-0.110, 0.080]	-0.016 (0.049) [-0.111, 0.080]	-0.015 (0.049) [-0.110, 0.080]	-0.015 (0.049) [-0.111, 0.080]
Family Income (\$10K)	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]
Family Income Below Poverty Line	-0.007 (0.087) [-0.179, 0.164]	-0.006 (0.087) [-0.178, 0.165]	-0.009 (0.087) [-0.180, 0.162]	-0.006 (0.087) [-0.177, 0.165]	-0.005 (0.087) [-0.177, 0.166]	-0.009 (0.087) [-0.180, 0.162]
Number of Siblings	-0.033* (0.015) [-0.062, -0.003]	-0.032* (0.015) [-0.062, -0.003]	-0.032* (0.015) [-0.062, -0.003]	-0.033* (0.015) [-0.062, -0.003]	-0.032* (0.015) [-0.062, -0.003]	-0.033* (0.015) [-0.062, -0.003]
Father Education	-0.014 (0.009) [-0.032, 0.003]	-0.015 (0.009) [-0.032, 0.003]	-0.014 (0.009) [-0.032, 0.003]	-0.014 (0.009) [-0.032, 0.003]	-0.015 (0.009) [-0.032, 0.003]	-0.014 (0.009) [-0.032, 0.003]

**TABLE RCHE\_E4.2C: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	-0.006 (0.010) [-0.026, 0.014]	-0.006 (0.010) [-0.026, 0.014]	-0.006 (0.010) [-0.026, 0.014]	-0.006 (0.010) [-0.026, 0.014]	-0.006 (0.010) [-0.026, 0.014]	-0.006 (0.010) [-0.026, 0.014]
Urban Location	0.015 (0.042) [-0.067, 0.097]	0.016 (0.042) [-0.066, 0.099]	0.014 (0.042) [-0.068, 0.096]	0.016 (0.042) [-0.066, 0.099]	0.017 (0.042) [-0.065, 0.100]	0.015 (0.042) [-0.067, 0.097]
Cognitive Ability (Z-Score)	0.129*** (0.029) [0.073, 0.186]	0.131*** (0.029) [0.074, 0.187]	0.129*** (0.029) [0.072, 0.185]	0.130*** (0.029) [0.074, 0.187]	0.131*** (0.029) [0.075, 0.188]	0.130*** (0.029) [0.073, 0.186]
Action Control: General Effort and Persistence Scale	-0.006 (0.031) [-0.066, 0.055]	-0.006 (0.031) [-0.067, 0.055]	-0.006 (0.031) [-0.067, 0.055]	-0.006 (0.031) [-0.067, 0.055]	-0.006 (0.031) [-0.067, 0.055]	-0.007 (0.031) [-0.068, 0.054]
Control Expectation Scale	0.045 (0.032) [-0.018, 0.108]	0.046 (0.032) [-0.017, 0.108]	0.045 (0.032) [-0.018, 0.108]	0.045 (0.032) [-0.018, 0.108]	0.045 (0.032) [-0.017, 0.108]	0.046 (0.032) [-0.017, 0.109]
Instrumental Motivation - Utility Interest - Scale	0.013 (0.025) [-0.037, 0.062]	0.014 (0.025) [-0.036, 0.063]	0.014 (0.025) [-0.036, 0.063]	0.013 (0.025) [-0.036, 0.063]	0.014 (0.025) [-0.036, 0.064]	0.014 (0.025) [-0.035, 0.063]
Non-Cognitive Ability (EXTERNAL)	0.024 (0.090) [-0.152, 0.200]	0.025 (0.090) [-0.152, 0.203]	0.023 (0.090) [-0.153, 0.200]	0.024 (0.090) [-0.151, 0.200]	0.025 (0.090) [-0.152, 0.202]	0.026 (0.090) [-0.150, 0.202]
Black - not Hispanic	-0.086 (0.079) [-0.240, 0.068]	-0.080 (0.079) [-0.235, 0.074]	-0.085 (0.079) [-0.239, 0.069]	-0.088 (0.078) [-0.242, 0.066]	-0.083 (0.078) [-0.237, 0.070]	-0.082 (0.078) [-0.235, 0.070]
American Indian or Alaska Native	-0.408 (0.237) [-0.872, 0.055]	-0.419 (0.236) [-0.883, 0.045]	-0.413 (0.236) [-0.877, 0.050]	-0.409 (0.234) [-0.868, 0.051]	-0.418 (0.235) [-0.878, 0.042]	-0.412 (0.233) [-0.869, 0.046]
Asian or Pacific Islander	0.173* (0.076) [0.024, 0.321]	0.175* (0.076) [0.027, 0.324]	0.173* (0.076) [0.024, 0.322]	0.174* (0.076) [0.025, 0.322]	0.175* (0.076) [0.027, 0.324]	0.175* (0.076) [0.026, 0.323]
Hispanic or Latino	0.002 (0.071) [-0.137, 0.141]	0.001 (0.071) [-0.138, 0.140]	0.001 (0.071) [-0.138, 0.140]	0.003 (0.071) [-0.136, 0.142]	0.002 (0.071) [-0.137, 0.141]	0.003 (0.071) [-0.135, 0.142]
Full Time Worker	0.861*** (0.056) [0.752, 0.970]	0.860*** (0.055) [0.752, 0.969]	0.860*** (0.055) [0.751, 0.968]	0.863*** (0.056) [0.753, 0.972]	0.862*** (0.056) [0.753, 0.971]	0.861*** (0.056) [0.751, 0.970]
Student in 2011	-0.290*** (0.040) [-0.368, -0.212]	-0.292*** (0.040) [-0.370, -0.214]	-0.291*** (0.040) [-0.370, -0.213]	-0.291*** (0.040) [-0.369, -0.213]	-0.291*** (0.040) [-0.369, -0.214]	-0.292*** (0.040) [-0.370, -0.214]
Constant	9.612*** (0.389) [8.849, 10.376]	9.613*** (0.389) [8.849, 10.376]	9.615*** (0.390) [8.849, 10.380]	9.608*** (0.388) [8.846, 10.369]	9.609*** (0.389) [8.847, 10.371]	9.605*** (0.389) [8.842, 10.369]
Observations	2,020	2,020	2,020	2,020	2,020	2,020
Adjusted R-squared	0.221	0.220	0.221	0.221	0.220	0.220

**TABLE RCHE\_E4.2C: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.090 (0.093)				
Incremental Effect of College Athletics for FBS Students			0.039 (0.144)			
Incremental Effect of College BB Athletics for Division I Students					0.177 (0.195)	
Incremental Effect of College BB Athletics for FBS Students						-0.088 (0.314)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RCHE\_E4.2D: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.140* (0.056) [0.029, 0.250]	0.120* (0.058) [0.007, 0.233]	0.143* (0.060) [0.026, 0.260]			
College Varsity and High School BB Varsity Athlete				0.190* (0.095) [0.004, 0.376]	0.188 (0.097) [-0.003, 0.379]	0.136 (0.117) [-0.093, 0.365]
College Varsity Athlete Non BB				0.121 (0.066) [-0.008, 0.250]	0.092 (0.068) [-0.041, 0.225]	0.146* (0.066) [0.016, 0.276]
College Varsity Athlete × Black	-0.112 (0.269) [-0.639, 0.415]					
College Varsity Athlete × Income Below Poverty Line		0.443 (0.240) [-0.027, 0.914]				
College Varsity Athlete × Single-Parent Household			-0.059 (0.157) [-0.367, 0.248]			
College BB Varsity Athlete × Black				0.034 (0.346) [-0.646, 0.713]		
College BB Varsity Athlete × Income Below Poverty Line					0.277 (0.152) [-0.020, 0.575]	
College BB Varsity Athlete × Single-Parent Household						0.231 (0.185) [-0.132, 0.594]
College Varsity Athlete Non BB × Black				-0.273 (0.390) [-1.038, 0.492]		
College Varsity Athlete Non BB × Income Below Poverty Line					0.535 (0.374) [-0.200, 1.269]	
College Varsity Athlete Non BB × Single-Parent Household						-0.205 (0.209) [-0.615, 0.204]
Single-Parent Household	-0.016 (0.049) [-0.111, 0.079]	-0.015 (0.049) [-0.110, 0.081]	-0.009 (0.050) [-0.108, 0.090]	-0.016 (0.049) [-0.111, 0.079]	-0.014 (0.049) [-0.110, 0.082]	-0.008 (0.050) [-0.107, 0.091]
Family Income (\$10K)	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.002, 0.020]	0.011* (0.005) [0.001, 0.020]
Family Income Below Poverty Line	-0.010 (0.087) [-0.181, 0.161]	-0.024 (0.090) [-0.200, 0.151]	-0.010 (0.088) [-0.182, 0.162]	-0.009 (0.087) [-0.180, 0.162]	-0.023 (0.090) [-0.199, 0.153]	-0.015 (0.088) [-0.187, 0.157]
Number of Siblings	-0.033* (0.015) [-0.062, -0.003]	-0.033* (0.015) [-0.062, -0.003]	-0.032* (0.015) [-0.062, -0.003]	-0.033* (0.015) [-0.062, -0.004]	-0.033* (0.015) [-0.062, -0.003]	-0.032* (0.015) [-0.062, -0.003]

**TABLE RCHE\_E4.2D: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	-0.014 (0.009) [-0.032, 0.003]	-0.014 (0.009) [-0.031, 0.003]	-0.014 (0.009) [-0.032, 0.003]	-0.015 (0.009) [-0.032, 0.002]	-0.014 (0.009) [-0.031, 0.003]	-0.014 (0.009) [-0.031, 0.003]
Mother Education	-0.006 (0.010) [-0.026, 0.014]	-0.007 (0.010) [-0.027, 0.014]	-0.006 (0.010) [-0.026, 0.014]	-0.006 (0.010) [-0.026, 0.014]	-0.006 (0.010) [-0.026, 0.014]	-0.006 (0.010) [-0.026, 0.014]
Urban Location	0.015 (0.042) [-0.068, 0.097]	0.015 (0.042) [-0.068, 0.097]	0.015 (0.042) [-0.068, 0.097]	0.017 (0.042) [-0.066, 0.100]	0.016 (0.042) [-0.067, 0.098]	0.015 (0.042) [-0.068, 0.097]
Cognitive Ability (Z-Score)	0.129*** (0.029) [0.073, 0.185]	0.129*** (0.029) [0.072, 0.185]	0.129*** (0.029) [0.073, 0.186]	0.130*** (0.029) [0.074, 0.186]	0.130*** (0.029) [0.073, 0.186]	0.130*** (0.029) [0.073, 0.186]
Action Control: General Effort and Persistence Scale	-0.006 (0.031) [-0.067, 0.055]	-0.006 (0.031) [-0.067, 0.055]	-0.006 (0.031) [-0.067, 0.055]	-0.006 (0.031) [-0.067, 0.055]	-0.006 (0.031) [-0.067, 0.055]	-0.006 (0.031) [-0.067, 0.055]
Control Expectation Scale	0.045 (0.032) [-0.018, 0.108]	0.046 (0.032) [-0.017, 0.109]	0.045 (0.032) [-0.018, 0.108]	0.045 (0.032) [-0.018, 0.108]	0.046 (0.032) [-0.017, 0.109]	0.047 (0.032) [-0.016, 0.110]
Instrumental Motivation - Utility Interest - Scale	0.013 (0.025) [-0.037, 0.062]	0.012 (0.025) [-0.038, 0.062]	0.012 (0.025) [-0.037, 0.062]	0.013 (0.025) [-0.037, 0.063]	0.012 (0.025) [-0.037, 0.062]	0.012 (0.025) [-0.038, 0.062]
Non-Cognitive Ability (EXTERNAL)	0.025 (0.090) [-0.152, 0.201]	0.024 (0.090) [-0.153, 0.200]	0.023 (0.090) [-0.154, 0.200]	0.022 (0.090) [-0.155, 0.199]	0.024 (0.090) [-0.152, 0.200]	0.017 (0.090) [-0.160, 0.195]
Black - not Hispanic	-0.070 (0.080) [-0.227, 0.087]	-0.085 (0.078) [-0.239, 0.068]	-0.087 (0.079) [-0.241, 0.067]	-0.070 (0.080) [-0.228, 0.087]	-0.088 (0.079) [-0.242, 0.066]	-0.087 (0.078) [-0.241, 0.066]
American Indian or Alaska Native	-0.409 (0.237) [-0.873, 0.055]	-0.403 (0.237) [-0.867, 0.061]	-0.405 (0.235) [-0.866, 0.056]	-0.411 (0.235) [-0.872, 0.051]	-0.404 (0.235) [-0.864, 0.056]	-0.415 (0.224) [-0.854, 0.025]
Asian or Pacific Islander	0.174* (0.076) [0.026, 0.323]	0.173* (0.076) [0.024, 0.322]	0.174* (0.076) [0.025, 0.322]	0.175* (0.076) [0.026, 0.323]	0.173* (0.076) [0.024, 0.322]	0.175* (0.076) [0.026, 0.324]
Hispanic or Latino	0.002 (0.071) [-0.137, 0.141]	0.004 (0.071) [-0.135, 0.143]	0.001 (0.071) [-0.137, 0.140]	0.003 (0.071) [-0.136, 0.142]	0.005 (0.071) [-0.134, 0.144]	0.005 (0.071) [-0.134, 0.144]
Full Time Worker	0.860*** (0.056) [0.751, 0.969]	0.860*** (0.056) [0.751, 0.969]	0.861*** (0.056) [0.752, 0.970]	0.862*** (0.056) [0.752, 0.971]	0.862*** (0.056) [0.753, 0.972]	0.860*** (0.056) [0.750, 0.970]
Student in 2011	-0.290*** (0.040) [-0.368, -0.212]	-0.291*** (0.040) [-0.369, -0.213]	-0.290*** (0.040) [-0.368, -0.212]	-0.291*** (0.040) [-0.369, -0.212]	-0.291*** (0.040) [-0.370, -0.213]	-0.293*** (0.040) [-0.372, -0.215]
Constant	9.610*** (0.390) [8.844, 10.375]	9.619*** (0.390) [8.854, 10.383]	9.614*** (0.390) [8.849, 10.378]	9.621*** (0.390) [8.856, 10.386]	9.612*** (0.389) [8.850, 10.375]	9.634*** (0.392) [8.866, 10.402]
Observations	2,020	2,020	2,020	2,020	2,020	2,020
Adjusted R-squared	0.221	0.221	0.221	0.220	0.221	0.221

**TABLE RCHE\_E4.2D: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Female; Conditional on Attending a 4-Year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.028 (0.263)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.563* (0.233)				
Incremental Effect of College Athletics for Single-Parent Household			0.083 (0.144)			
Incremental Effect of College BB Athletics for Blacks				0.224 (0.333)		
Incremental Effect of College BB Athletics for Income Below Poverty Line					0.466*** (0.120)	
Incremental Effect of College BB Athletics for Single-Parent Household						0.367* (0.144)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

# Appendix C2

## TABLE RBFO\_N1.1A: High School Graduation

Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model

Sex: Male (Alternative BB/FB Definition)

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.078*** (0.009) [0.060 , 0.097]	
High School Sophomore BB/FB Varsity Athlete			0.082*** (0.014) [0.055 , 0.109]
High School Sophomore Non BB/FB Varsity Athlete			0.077*** (0.010) [0.058 , 0.096]
Single-Parent Household	-0.025* (0.012) [-0.049 , -0.001]	-0.021 (0.012) [-0.045 , 0.002]	-0.022 (0.012) [-0.045 , 0.002]
Family Income (\$10K)	-0.000 (0.001) [-0.003 , 0.002]	-0.001 (0.001) [-0.003 , 0.002]	-0.001 (0.001) [-0.003 , 0.002]
Family Income Below Poverty Line	-0.063** (0.022) [-0.105 , -0.020]	-0.059** (0.022) [-0.102 , -0.017]	-0.059** (0.022) [-0.102 , -0.017]
Number of Siblings	-0.005 (0.003) [-0.012 , 0.002]	-0.005 (0.003) [-0.012 , 0.002]	-0.005 (0.003) [-0.012 , 0.002]
Father Education	0.006** (0.002) [0.002 , 0.010]	0.005* (0.002) [0.000 , 0.009]	0.005* (0.002) [0.000 , 0.009]
Mother Education	0.001 (0.002) [-0.004 , 0.005]	-0.000 (0.002) [-0.005 , 0.004]	-0.000 (0.002) [-0.005 , 0.004]
Urban Location	-0.032** (0.011) [-0.054 , -0.010]	-0.028* (0.011) [-0.050 , -0.007]	-0.028* (0.011) [-0.050 , -0.007]
Cognitive Ability (Z-Score)	0.033*** (0.005) [0.023 , 0.043]	0.033*** (0.005) [0.023 , 0.043]	0.033*** (0.005) [0.023 , 0.043]



## TABLE RBFO\_N1.1A: High School Graduation

Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model

Sex: Male (Alternative BB/FB Definition)

VARIABLES	(1)	(2)	(3)
Locus of Control	0.010 (0.010) [-0.009, 0.029]	0.009 (0.009) [-0.010, 0.027]	0.009 (0.009) [-0.010, 0.027]
Self Concept	0.019* (0.008) [0.002, 0.035]	0.014 (0.008) [-0.002, 0.031]	0.015 (0.008) [-0.002, 0.031]
Non-Cognitive Ability (EXTERNAL)	0.161*** (0.018) [0.126, 0.196]	0.155*** (0.018) [0.120, 0.190]	0.155*** (0.018) [0.120, 0.190]
Black - not Hispanic	0.019 (0.022) [-0.025, 0.063]	0.015 (0.022) [-0.029, 0.058]	0.014 (0.022) [-0.029, 0.057]
American Indian or Alaska Native	-0.042 (0.069) [-0.177, 0.093]	-0.039 (0.066) [-0.168, 0.091]	-0.038 (0.066) [-0.168, 0.092]
Asian or Pacific Islander	0.004 (0.017) [-0.028, 0.037]	0.009 (0.016) [-0.023, 0.041]	0.009 (0.016) [-0.023, 0.041]
Hispanic or Latino	0.000 (0.017) [-0.033, 0.034]	-0.005 (0.017) [-0.039, 0.028]	-0.005 (0.017) [-0.039, 0.028]
Constant	0.248*** (0.074) [0.102, 0.394]	0.255*** (0.073) [0.112, 0.398]	0.254*** (0.073) [0.110, 0.398]
Observations	3,560	3,560	3,560
Adjusted R-squared	0.117	0.135	0.135

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N1.1B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.076*** (0.010) [0.057, 0.095]	0.074*** (0.010) [0.055, 0.092]	0.067*** (0.010) [0.047, 0.087]			
HS Sophomore Athlete × Black	0.034 (0.047) [-0.058, 0.126]					
HS Sophomore Athlete × Income Below Poverty Line		0.042 (0.040) [-0.036, 0.121]				
HS Sophomore Athlete × Single-Parent Household			0.045 (0.025) [-0.003, 0.094]			
High School Sophomore BB/FB Varsity Athlete				0.082*** (0.014) [0.055, 0.110]	0.076*** (0.014) [0.048, 0.103]	0.065*** (0.015) [0.034, 0.095]
High School Sophomore Non BB/FB Varsity Athlete				0.074*** (0.010) [0.055, 0.093]	0.073*** (0.010) [0.054, 0.092]	0.068*** (0.010) [0.047, 0.088]
HS Sophomore BB/FB Athlete × Black				0.007 (0.058) [-0.106, 0.121]		
HS Non BB/FB Varsity Athlete × Black				0.051 (0.048) [-0.043, 0.145]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					0.050 (0.053) [-0.054, 0.154]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					0.038 (0.044) [-0.048, 0.123]	
HS Sophomore BB/FB Athlete × Single-Parent Household						0.067* (0.033) [0.001, 0.132]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.037 (0.025) [-0.012, 0.087]
Single-Parent Household	-0.022 (0.012) [-0.045, 0.002]	-0.022 (0.012) [-0.045, 0.002]	-0.047* (0.022) [-0.090, -0.004]	-0.022 (0.012) [-0.046, 0.002]	-0.022 (0.012) [-0.046, 0.002]	-0.047* (0.022) [-0.089, -0.004]
Family Income (\$10K)	-0.001 (0.001) [-0.003, 0.002]	-0.001 (0.001) [-0.003, 0.002]	-0.001 (0.001) [-0.003, 0.002]	-0.001 (0.001) [-0.003, 0.002]	-0.001 (0.001) [-0.003, 0.002]	-0.001 (0.001) [-0.003, 0.002]
Family Income Below Poverty Line	-0.059** (0.022) [-0.102, -0.017]	-0.080* (0.033) [-0.144, -0.016]	-0.059** (0.022) [-0.101, -0.016]	-0.059** (0.022) [-0.101, -0.017]	-0.079* (0.033) [-0.144, -0.015]	-0.059** (0.022) [-0.102, -0.017]
Number of Siblings	-0.005 (0.003) [-0.012, 0.002]	-0.005 (0.003) [-0.012, 0.002]	-0.005 (0.003) [-0.012, 0.002]	-0.005 (0.003) [-0.012, 0.002]	-0.005 (0.003) [-0.012, 0.002]	-0.005 (0.003) [-0.012, 0.002]

**TABLE RBFO\_N1.1B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]
Mother Education	-0.000 (0.002) [-0.005, 0.004]	-0.000 (0.002) [-0.005, 0.004]	-0.000 (0.002) [-0.005, 0.004]	-0.000 (0.002) [-0.005, 0.004]	-0.000 (0.002) [-0.005, 0.004]	-0.000 (0.002) [-0.005, 0.004]
Urban Location	-0.028* (0.011) [-0.050, -0.007]	-0.028* (0.011) [-0.050, -0.006]	-0.028* (0.011) [-0.050, -0.006]	-0.028* (0.011) [-0.050, -0.007]	-0.028* (0.011) [-0.050, -0.006]	-0.028* (0.011) [-0.050, -0.006]
Cognitive Ability (Z-Score)	0.033*** (0.005) [0.023, 0.043]	0.033*** (0.005) [0.023, 0.043]	0.033*** (0.005) [0.024, 0.043]	0.034*** (0.005) [0.024, 0.043]	0.033*** (0.005) [0.023, 0.043]	0.034*** (0.005) [0.024, 0.044]
Locus of Control	0.009 (0.009) [-0.010, 0.027]	0.009 (0.009) [-0.009, 0.028]	0.010 (0.009) [-0.009, 0.028]	0.009 (0.009) [-0.010, 0.027]	0.009 (0.009) [-0.009, 0.028]	0.009 (0.009) [-0.009, 0.028]
Self Concept	0.015 (0.008) [-0.002, 0.031]	0.014 (0.008) [-0.002, 0.031]	0.014 (0.008) [-0.002, 0.030]	0.015 (0.008) [-0.001, 0.031]	0.014 (0.008) [-0.002, 0.031]	0.014 (0.008) [-0.002, 0.030]
Non-Cognitive Ability (EXTERNAL)	0.155*** (0.018) [0.120, 0.190]	0.155*** (0.018) [0.120, 0.190]	0.154*** (0.018) [0.119, 0.188]	0.155*** (0.018) [0.120, 0.190]	0.155*** (0.018) [0.120, 0.190]	0.154*** (0.018) [0.119, 0.188]
Black - not Hispanic	-0.006 (0.042) [-0.088, 0.075]	0.013 (0.022) [-0.031, 0.056]	0.013 (0.022) [-0.031, 0.056]	-0.006 (0.042) [-0.088, 0.075]	0.012 (0.022) [-0.031, 0.056]	0.012 (0.022) [-0.031, 0.056]
American Indian or Alaska Native	-0.039 (0.066) [-0.169, 0.091]	-0.039 (0.066) [-0.168, 0.089]	-0.037 (0.066) [-0.166, 0.092]	-0.039 (0.066) [-0.169, 0.092]	-0.040 (0.066) [-0.169, 0.089]	-0.036 (0.066) [-0.165, 0.094]
Asian or Pacific Islander	0.009 (0.016) [-0.023, 0.041]	0.010 (0.016) [-0.023, 0.042]	0.009 (0.016) [-0.023, 0.042]	0.009 (0.016) [-0.023, 0.041]	0.010 (0.016) [-0.022, 0.042]	0.010 (0.016) [-0.023, 0.042]
Hispanic or Latino	-0.005 (0.017) [-0.039, 0.028]	-0.005 (0.017) [-0.039, 0.028]	-0.006 (0.017) [-0.040, 0.027]	-0.005 (0.017) [-0.039, 0.028]	-0.005 (0.017) [-0.038, 0.028]	-0.006 (0.017) [-0.039, 0.027]
Constant	0.256*** (0.073) [0.112, 0.399]	0.256*** (0.073) [0.113, 0.400]	0.267*** (0.073) [0.123, 0.411]	0.256*** (0.073) [0.112, 0.400]	0.256*** (0.073) [0.112, 0.399]	0.266*** (0.073) [0.123, 0.410]
Observations	3,560	3,560	3,560	3,560	3,560	3,560
Adjusted R-squared	0.135	0.135	0.136	0.135	0.135	0.136

**TABLE RBFO\_N1.1B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.110* (0.046)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.116** (0.039)				
Incremental Effect of HS Athletics for Single-Parent Household			0.112*** (0.022)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.090 (0.056)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.126* (0.051)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.131*** (0.030)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N1.2A: High School Graduation

Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model

Sex: Female (Alternative BB Definition)

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.043*** (0.007) [0.029 , 0.057]	
High School Sophomore BB Varsity Athlete			0.033 (0.024) [-0.015 , 0.081]
High School Sophomore Non BB Varsity Athlete			0.044*** (0.007) [0.030 , 0.058]
Single-Parent Household	-0.007 (0.010) [-0.027 , 0.013]	-0.005 (0.010) [-0.026 , 0.015]	-0.005 (0.010) [-0.025 , 0.015]
Family Income (\$10K)	-0.001 (0.001) [-0.003 , 0.001]	-0.002 (0.001) [-0.004 , 0.000]	-0.002 (0.001) [-0.004 , 0.000]
Family Income Below Poverty Line	-0.041* (0.018) [-0.076 , -0.006]	-0.040* (0.018) [-0.075 , -0.005]	-0.040* (0.018) [-0.075 , -0.004]
Number of Siblings	-0.006* (0.003) [-0.012 , -0.001]	-0.007* (0.003) [-0.012 , -0.001]	-0.007* (0.003) [-0.012 , -0.001]
Father Education	0.004* (0.002) [0.001 , 0.007]	0.004* (0.002) [0.000 , 0.007]	0.004* (0.002) [0.000 , 0.007]
Mother Education	0.003 (0.002) [-0.000 , 0.007]	0.002 (0.002) [-0.001 , 0.006]	0.002 (0.002) [-0.001 , 0.006]
Urban Location	-0.003 (0.009) [-0.021 , 0.015]	-0.001 (0.009) [-0.019 , 0.017]	-0.001 (0.009) [-0.019 , 0.017]
Cognitive Ability (Z-Score)	0.044*** (0.005) [0.034 , 0.053]	0.043*** (0.005) [0.033 , 0.052]	0.043*** (0.005) [0.033 , 0.052]

## TABLE RBFO\_N1.2A: High School Graduation

**Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.034*** (0.009) [0.016 , 0.052]	0.032*** (0.009) [0.014 , 0.050]	0.032*** (0.009) [0.014 , 0.050]
Self Concept	-0.005 (0.008) [-0.021 , 0.011]	-0.008 (0.008) [-0.024 , 0.009]	-0.008 (0.008) [-0.024 , 0.009]
Non-Cognitive Ability (EXTERNAL)	0.145*** (0.021) [0.105 , 0.186]	0.141*** (0.021) [0.100 , 0.182]	0.141*** (0.021) [0.100 , 0.182]
Black - not Hispanic	-0.003 (0.018) [-0.038 , 0.032]	0.000 (0.018) [-0.035 , 0.035]	0.000 (0.018) [-0.035 , 0.035]
American Indian or Alaska Native	-0.101 (0.064) [-0.225 , 0.024]	-0.105 (0.064) [-0.230 , 0.021]	-0.104 (0.064) [-0.230 , 0.022]
Asian or Pacific Islander	0.007 (0.010) [-0.013 , 0.027]	0.011 (0.010) [-0.010 , 0.031]	0.011 (0.010) [-0.010 , 0.031]
Hispanic or Latino	0.005 (0.015) [-0.024 , 0.034]	0.007 (0.015) [-0.022 , 0.036]	0.007 (0.015) [-0.022 , 0.036]
Constant	0.304*** (0.085) [0.137 , 0.471]	0.317*** (0.085) [0.151 , 0.484]	0.318*** (0.085) [0.152 , 0.484]
Observations	3,970	3,970	3,970
Adjusted R-squared	0.116	0.122	0.122

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N1.2B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.041*** (0.007) [0.027, 0.056]	0.043*** (0.007) [0.029, 0.057]	0.034*** (0.008) [0.019, 0.050]			
HS Sophomore Athlete × Black	0.020 (0.034) [-0.047, 0.087]					
HS Sophomore Athlete × Income Below Poverty Line		0.003 (0.034) [-0.063, 0.069]				
HS Sophomore Athlete × Single-Parent Household			0.035 (0.018) [-0.001, 0.071]			
High School Sophomore BB Varsity Athlete				0.044* (0.022) [0.001, 0.087]	0.037 (0.024) [-0.010, 0.084]	0.025 (0.026) [-0.026, 0.075]
High School Sophomore Non BB Varsity Athlete				0.041*** (0.007) [0.027, 0.056]	0.043*** (0.007) [0.029, 0.057]	0.035*** (0.008) [0.019, 0.050]
HS Sophomore BB Athlete × Black				-0.075 (0.111) [-0.292, 0.143]		
HS Non BB Varsity Athlete × Black				0.034 (0.033) [-0.030, 0.098]		
HS Sophomore BB Athlete × Income Below Poverty Line					-0.024 (0.086) [-0.192, 0.145]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.008 (0.035) [-0.060, 0.076]	
HS Sophomore BB Athlete × Single-Parent Household						0.027 (0.063) [-0.096, 0.151]
HS Non BB Varsity Athlete × Single-Parent Household						0.036* (0.018) [0.000, 0.072]
Single-Parent Household	-0.006 (0.010) [-0.026, 0.015]	-0.005 (0.010) [-0.026, 0.015]	-0.020 (0.015) [-0.050, 0.010]	-0.005 (0.010) [-0.026, 0.015]	-0.005 (0.010) [-0.026, 0.015]	-0.020 (0.015) [-0.050, 0.010]
Family Income (\$10K)	-0.002 (0.001) [-0.004, 0.000]	-0.002 (0.001) [-0.004, 0.000]	-0.002 (0.001) [-0.004, 0.000]	-0.002 (0.001) [-0.004, 0.000]	-0.002 (0.001) [-0.004, 0.000]	-0.002 (0.001) [-0.004, 0.000]
Family Income Below Poverty Line	-0.040* (0.018) [-0.075, -0.005]	-0.041 (0.022) [-0.083, 0.002]	-0.039* (0.018) [-0.074, -0.004]	-0.039* (0.018) [-0.074, -0.004]	-0.041 (0.022) [-0.084, 0.002]	-0.039* (0.018) [-0.074, -0.004]
Number of Siblings	-0.007* (0.003) [-0.012, -0.001]	-0.007* (0.003) [-0.012, -0.001]	-0.006* (0.003) [-0.012, -0.001]	-0.007* (0.003) [-0.012, -0.001]	-0.007* (0.003) [-0.012, -0.001]	-0.006* (0.003) [-0.012, -0.001]

**TABLE RBFO\_N1.2B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.004* (0.002) [0.000, 0.007]	0.004* (0.002) [0.000, 0.007]	0.004* (0.002) [0.000, 0.007]	0.004* (0.002) [0.000, 0.007]	0.004* (0.002) [0.000, 0.007]	0.004* (0.002) [0.000, 0.007]
Mother Education	0.002 (0.002) [-0.001, 0.006]	0.002 (0.002) [-0.001, 0.006]	0.002 (0.002) [-0.001, 0.006]	0.002 (0.002) [-0.001, 0.006]	0.002 (0.002) [-0.001, 0.006]	0.002 (0.002) [-0.001, 0.006]
Urban Location	-0.001 (0.009) [-0.019, 0.017]	-0.001 (0.009) [-0.019, 0.017]	-0.001 (0.009) [-0.018, 0.017]	-0.001 (0.009) [-0.019, 0.017]	-0.001 (0.009) [-0.019, 0.017]	-0.001 (0.009) [-0.019, 0.017]
Cognitive Ability (Z-Score)	0.043*** (0.005) [0.033, 0.052]	0.043*** (0.005) [0.033, 0.052]	0.043*** (0.005) [0.033, 0.052]	0.043*** (0.005) [0.033, 0.052]	0.043*** (0.005) [0.033, 0.052]	0.043*** (0.005) [0.033, 0.052]
Locus of Control	0.033*** (0.009) [0.015, 0.050]	0.032*** (0.009) [0.014, 0.050]	0.032*** (0.009) [0.014, 0.050]	0.032*** (0.009) [0.014, 0.050]	0.032*** (0.009) [0.014, 0.050]	0.032*** (0.009) [0.014, 0.050]
Self Concept	-0.007 (0.008) [-0.023, 0.009]	-0.007 (0.008) [-0.023, 0.009]	-0.007 (0.008) [-0.023, 0.009]	-0.007 (0.008) [-0.023, 0.009]	-0.007 (0.008) [-0.023, 0.009]	-0.007 (0.008) [-0.023, 0.009]
Non-Cognitive Ability (EXTERNAL)	0.141*** (0.021) [0.101, 0.182]	0.141*** (0.021) [0.100, 0.182]	0.141*** (0.021) [0.100, 0.181]	0.141*** (0.021) [0.101, 0.182]	0.141*** (0.021) [0.100, 0.181]	0.141*** (0.021) [0.100, 0.181]
Black - not Hispanic	-0.007 (0.024) [-0.053, 0.040]	0.000 (0.018) [-0.035, 0.035]	-0.001 (0.018) [-0.036, 0.034]	-0.007 (0.024) [-0.054, 0.039]	0.001 (0.018) [-0.035, 0.036]	-0.001 (0.018) [-0.036, 0.034]
American Indian or Alaska Native	-0.104 (0.064) [-0.230, 0.021]	-0.104 (0.064) [-0.230, 0.021]	-0.104 (0.064) [-0.230, 0.021]	-0.105 (0.064) [-0.231, 0.021]	-0.103 (0.064) [-0.229, 0.022]	-0.103 (0.064) [-0.229, 0.022]
Asian or Pacific Islander	0.011 (0.010) [-0.010, 0.031]	0.011 (0.010) [-0.010, 0.031]	0.010 (0.010) [-0.011, 0.030]	0.011 (0.010) [-0.010, 0.031]	0.011 (0.011) [-0.010, 0.031]	0.010 (0.010) [-0.011, 0.030]
Hispanic or Latino	0.007 (0.015) [-0.022, 0.035]	0.007 (0.015) [-0.022, 0.036]	0.006 (0.015) [-0.023, 0.035]	0.007 (0.015) [-0.022, 0.035]	0.007 (0.015) [-0.022, 0.035]	0.006 (0.015) [-0.023, 0.035]
Constant	0.317*** (0.085) [0.151, 0.483]	0.317*** (0.085) [0.151, 0.484]	0.321*** (0.085) [0.155, 0.487]	0.317*** (0.085) [0.150, 0.483]	0.318*** (0.085) [0.152, 0.484]	0.322*** (0.085) [0.155, 0.488]
Observations	3,970	3,970	3,970	3,970	3,970	3,970
Adjusted R-squared	0.122	0.122	0.123	0.122	0.122	0.123



**TABLE RBFO\_N1.2B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 1992; Linear Probability Model**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.062 (0.033)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.046 (0.033)				
Incremental Effect of HS Athletics for Single-Parent Household			0.069*** (0.016)			
Incremental Effect of HS BB Athletics for Blacks				-0.031 (0.109)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.013 (0.082)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.052 (0.057)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N2.1A: College Attendance

**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.093*** (0.015) [0.063 , 0.123]	
High School Sophomore BB/FB Varsity Athlete			0.047* (0.024) [0.001 , 0.094]
High School Sophomore Non BB/FB Varsity Athlete			0.108*** (0.016) [0.077 , 0.139]
Single-Parent Household	-0.057** (0.019) [-0.094 , -0.020]	-0.054** (0.019) [-0.090 , -0.017]	-0.053** (0.019) [-0.089 , -0.016]
Family Income (\$10K)	0.007*** (0.002) [0.003 , 0.011]	0.006*** (0.002) [0.003 , 0.010]	0.006*** (0.002) [0.003 , 0.010]
Family Income Below Poverty Line	-0.066* (0.032) [-0.129 , -0.003]	-0.061 (0.032) [-0.123 , 0.001]	-0.060 (0.032) [-0.122 , 0.002]
Number of Siblings	-0.006 (0.005) [-0.017 , 0.004]	-0.006 (0.005) [-0.017 , 0.004]	-0.006 (0.005) [-0.017 , 0.004]
Father Education	0.020*** (0.003) [0.013 , 0.026]	0.018*** (0.003) [0.012 , 0.024]	0.018*** (0.003) [0.012 , 0.024]
Mother Education	0.014*** (0.003) [0.007 , 0.021]	0.013*** (0.003) [0.006 , 0.020]	0.013*** (0.003) [0.006 , 0.020]
Urban Location	0.015 (0.017) [-0.017 , 0.048]	0.019 (0.017) [-0.013 , 0.052]	0.019 (0.016) [-0.014 , 0.051]
Cognitive Ability (Z-Score)	0.092*** (0.008) [0.077 , 0.108]	0.093*** (0.008) [0.078 , 0.109]	0.092*** (0.008) [0.076 , 0.107]

## TABLE RBFO\_N2.1A: College Attendance

**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.029 (0.015) [-0.002, 0.059]	0.028 (0.015) [-0.003, 0.058]	0.028 (0.015) [-0.002, 0.058]
Self Concept	0.016 (0.014) [-0.011, 0.042]	0.011 (0.014) [-0.016, 0.038]	0.010 (0.014) [-0.017, 0.037]
Non-Cognitive Ability (EXTERNAL)	0.151*** (0.025) [0.101, 0.200]	0.146*** (0.025) [0.097, 0.195]	0.144*** (0.025) [0.095, 0.193]
Black - not Hispanic	0.076* (0.034) [0.010, 0.142]	0.071* (0.033) [0.006, 0.136]	0.076* (0.033) [0.011, 0.141]
American Indian or Alaska Native	-0.137 (0.096) [-0.325, 0.051]	-0.139 (0.095) [-0.325, 0.046]	-0.142 (0.095) [-0.328, 0.043]
Asian or Pacific Islander	0.077** (0.028) [0.023, 0.132]	0.082** (0.028) [0.027, 0.137]	0.080** (0.028) [0.025, 0.135]
Hispanic or Latino	0.092*** (0.026) [0.040, 0.143]	0.085** (0.026) [0.034, 0.137]	0.083** (0.026) [0.031, 0.134]
Constant	-0.346*** (0.105) [-0.551, -0.141]	-0.354*** (0.104) [-0.558, -0.151]	-0.339** (0.104) [-0.543, -0.135]
Observations	3,250	3,250	3,250
Adjusted R-squared	0.185	0.195	0.196

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N2.1B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.088*** (0.016) [0.057, 0.119]	0.089*** (0.016) [0.058, 0.120]	0.098*** (0.017) [0.065, 0.132]			
HS Sophomore Athlete × Black	0.084 (0.067) [-0.047, 0.216]					
HS Sophomore Athlete × Income Below Poverty Line		0.042 (0.058) [-0.072, 0.156]				
HS Sophomore Athlete × Single-Parent Household			-0.021 (0.037) [-0.095, 0.052]			
High School Sophomore BB/FB Varsity Athlete				0.036 (0.025) [-0.012, 0.085]	0.039 (0.025) [-0.009, 0.088]	0.051 (0.027) [-0.001, 0.103]
High School Sophomore Non BB/FB Varsity Athlete				0.104*** (0.016) [0.072, 0.135]	0.104*** (0.016) [0.072, 0.136]	0.112*** (0.018) [0.078, 0.146]
HS Sophomore BB/FB Athlete × Black				0.127 (0.088) [-0.045, 0.298]		
HS Non BB/FB Varsity Athlete × Black				0.075 (0.071) [-0.065, 0.216]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					0.069 (0.083) [-0.094, 0.231]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					0.040 (0.064) [-0.086, 0.166]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.016 (0.058) [-0.129, 0.097]
HS Non BB/FB Varsity Athlete × Single-Parent Household						-0.019 (0.039) [-0.095, 0.057]
Single-Parent Household	-0.054** (0.019) [-0.091, -0.018]	-0.054** (0.019) [-0.090, -0.017]	-0.041 (0.030) [-0.100, 0.018]	-0.053** (0.019) [-0.090, -0.017]	-0.053** (0.019) [-0.089, -0.016]	-0.042 (0.030) [-0.101, 0.017]
Family Income (\$10K)	0.006*** (0.002) [0.003, 0.010]	0.006*** (0.002) [0.003, 0.010]	0.006*** (0.002) [0.003, 0.010]	0.006*** (0.002) [0.003, 0.010]	0.006*** (0.002) [0.003, 0.010]	0.006*** (0.002) [0.003, 0.010]
Family Income Below Poverty Line	-0.062 (0.032) [-0.124, 0.001]	-0.083 (0.044) [-0.169, 0.003]	-0.062 (0.032) [-0.124, 0.001]	-0.061 (0.032) [-0.123, 0.001]	-0.086 (0.044) [-0.172, 0.000]	-0.060 (0.032) [-0.123, 0.002]
Number of Siblings	-0.006 (0.005) [-0.016, 0.004]	-0.006 (0.005) [-0.016, 0.004]	-0.006 (0.005) [-0.017, 0.004]	-0.006 (0.005) [-0.016, 0.004]	-0.006 (0.005) [-0.017, 0.004]	-0.006 (0.005) [-0.017, 0.004]

**TABLE RBFO\_N2.1B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.018*** (0.003) [0.012, 0.024]	0.018*** (0.003) [0.012, 0.024]	0.018*** (0.003) [0.012, 0.024]	0.018*** (0.003) [0.012, 0.024]	0.018*** (0.003) [0.012, 0.024]	0.018*** (0.003) [0.012, 0.024]
Mother Education	0.013*** (0.003) [0.006, 0.020]	0.013*** (0.003) [0.006, 0.020]	0.013*** (0.003) [0.006, 0.020]	0.013*** (0.003) [0.006, 0.020]	0.013*** (0.003) [0.006, 0.019]	0.013*** (0.003) [0.006, 0.020]
Urban Location	0.019 (0.017) [-0.014, 0.051]	0.019 (0.017) [-0.013, 0.052]	0.019 (0.017) [-0.014, 0.051]	0.018 (0.016) [-0.014, 0.051]	0.019 (0.017) [-0.013, 0.052]	0.019 (0.017) [-0.014, 0.051]
Cognitive Ability (Z-Score)	0.093*** (0.008) [0.078, 0.109]	0.093*** (0.008) [0.078, 0.109]	0.093*** (0.008) [0.078, 0.109]	0.092*** (0.008) [0.076, 0.107]	0.091*** (0.008) [0.076, 0.107]	0.092*** (0.008) [0.076, 0.107]
Locus of Control	0.027 (0.015) [-0.003, 0.058]	0.028 (0.015) [-0.003, 0.058]	0.027 (0.015) [-0.003, 0.057]	0.028 (0.015) [-0.002, 0.058]	0.028 (0.015) [-0.002, 0.058]	0.027 (0.015) [-0.003, 0.058]
Self Concept	0.011 (0.014) [-0.015, 0.038]	0.011 (0.014) [-0.016, 0.038]	0.011 (0.014) [-0.016, 0.038]	0.010 (0.014) [-0.017, 0.037]	0.010 (0.014) [-0.017, 0.036]	0.010 (0.014) [-0.017, 0.037]
Non-Cognitive Ability (EXTERNAL)	0.147*** (0.025) [0.098, 0.195]	0.147*** (0.025) [0.097, 0.196]	0.146*** (0.025) [0.097, 0.195]	0.144*** (0.025) [0.095, 0.193]	0.144*** (0.025) [0.095, 0.193]	0.144*** (0.025) [0.095, 0.193]
Black - not Hispanic	0.016 (0.056) [-0.093, 0.126]	0.069* (0.033) [0.004, 0.135]	0.072* (0.033) [0.006, 0.137]	0.015 (0.056) [-0.095, 0.125]	0.074* (0.033) [0.009, 0.139]	0.077* (0.033) [0.011, 0.142]
American Indian or Alaska Native	-0.139 (0.095) [-0.325, 0.046]	-0.142 (0.095) [-0.327, 0.043]	-0.140 (0.094) [-0.325, 0.045]	-0.142 (0.095) [-0.328, 0.043]	-0.147 (0.095) [-0.332, 0.038]	-0.143 (0.094) [-0.328, 0.042]
Asian or Pacific Islander	0.082** (0.028) [0.027, 0.137]	0.083** (0.028) [0.028, 0.138]	0.082** (0.028) [0.027, 0.137]	0.080** (0.028) [0.025, 0.135]	0.081** (0.028) [0.026, 0.136]	0.080** (0.028) [0.025, 0.135]
Hispanic or Latino	0.086** (0.026) [0.034, 0.137]	0.085** (0.026) [0.034, 0.137]	0.085** (0.026) [0.034, 0.137]	0.083** (0.026) [0.032, 0.135]	0.083** (0.026) [0.031, 0.135]	0.083** (0.026) [0.031, 0.135]
Constant	-0.353*** (0.104) [-0.556, -0.149]	-0.353*** (0.104) [-0.557, -0.150]	-0.359*** (0.104) [-0.563, -0.155]	-0.338** (0.104) [-0.542, -0.134]	-0.337** (0.104) [-0.541, -0.133]	-0.343** (0.104) [-0.548, -0.138]
Observations	3,250	3,250	3,250	3,250	3,250	3,250
Adjusted R-squared	0.195	0.195	0.194	0.197	0.196	0.196

**TABLE RBFO\_N2.1B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.172** (0.065)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.131* (0.056)				
Incremental Effect of HS Athletics for Single-Parent Household			0.077* (0.034)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.163 (0.084)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.108 (0.079)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.035 (0.051)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N2.2A: College Attendance

**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.082*** (0.013) [0.056 , 0.108]	
High School Sophomore BB Varsity Athlete			0.070 (0.041) [-0.011 , 0.151]
High School Sophomore Non BB Varsity Athlete			0.082*** (0.013) [0.056 , 0.109]
Single-Parent Household	-0.012 (0.016) [-0.045 , 0.020]	-0.010 (0.016) [-0.042 , 0.022]	-0.010 (0.016) [-0.042 , 0.023]
Family Income (\$10K)	0.003 (0.002) [-0.000 , 0.006]	0.002 (0.002) [-0.001 , 0.005]	0.002 (0.002) [-0.001 , 0.005]
Family Income Below Poverty Line	-0.056* (0.026) [-0.108 , -0.004]	-0.051* (0.026) [-0.103 , -0.000]	-0.051* (0.026) [-0.103 , -0.000]
Number of Siblings	-0.014** (0.005) [-0.023 , -0.004]	-0.014** (0.005) [-0.023 , -0.005]	-0.014** (0.005) [-0.023 , -0.005]
Father Education	0.014*** (0.003) [0.008 , 0.020]	0.013*** (0.003) [0.008 , 0.019]	0.013*** (0.003) [0.008 , 0.019]
Mother Education	0.012*** (0.003) [0.006 , 0.018]	0.010** (0.003) [0.004 , 0.016]	0.010** (0.003) [0.004 , 0.016]
Urban Location	0.020 (0.015) [-0.009 , 0.048]	0.024 (0.015) [-0.005 , 0.052]	0.023 (0.015) [-0.005 , 0.052]
Cognitive Ability (Z-Score)	0.106*** (0.008) [0.091 , 0.122]	0.104*** (0.008) [0.089 , 0.120]	0.104*** (0.008) [0.089 , 0.120]

## TABLE RBFO\_N2.2A: College Attendance

**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.039** (0.014) [0.011, 0.067]	0.037** (0.014) [0.009, 0.065]	0.037** (0.014) [0.009, 0.065]
Self Concept	0.012 (0.012) [-0.012, 0.036]	0.008 (0.012) [-0.016, 0.031]	0.007 (0.012) [-0.016, 0.031]
Non-Cognitive Ability (EXTERNAL)	0.128*** (0.026) [0.078, 0.178]	0.121*** (0.026) [0.071, 0.171]	0.121*** (0.026) [0.071, 0.171]
Black - not Hispanic	0.093*** (0.026) [0.043, 0.144]	0.100*** (0.026) [0.049, 0.151]	0.100*** (0.026) [0.049, 0.151]
American Indian or Alaska Native	-0.142 (0.083) [-0.305, 0.021]	-0.145 (0.083) [-0.307, 0.017]	-0.144 (0.083) [-0.306, 0.017]
Asian or Pacific Islander	0.032 (0.024) [-0.016, 0.079]	0.040 (0.025) [-0.008, 0.088]	0.040 (0.025) [-0.008, 0.088]
Hispanic or Latino	0.069** (0.023) [0.024, 0.114]	0.074** (0.023) [0.029, 0.118]	0.074** (0.023) [0.029, 0.118]
Constant	-0.075 (0.106) [-0.283, 0.134]	-0.056 (0.106) [-0.264, 0.152]	-0.055 (0.106) [-0.263, 0.152]
Observations	3,690	3,690	3,690
Adjusted R-squared	0.164	0.172	0.172

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.



**TABLE RBFO\_N2.2B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.092*** (0.014) [0.065, 0.118]	0.079*** (0.014) [0.053, 0.106]	0.073*** (0.015) [0.044, 0.102]			
HS Sophomore Athlete × Black	-0.124* (0.051) [-0.224, -0.025]					
HS Sophomore Athlete × Income Below Poverty Line		0.025 (0.051) [-0.074, 0.125]				
HS Sophomore Athlete × Single-Parent Household			0.034 (0.031) [-0.026, 0.094]			
High School Sophomore BB Varsity Athlete				0.071 (0.044) [-0.015, 0.156]	0.081 (0.043) [-0.004, 0.165]	0.055 (0.046) [-0.036, 0.146]
High School Sophomore Non BB Varsity Athlete				0.093*** (0.014) [0.066, 0.120]	0.079*** (0.014) [0.052, 0.106]	0.074*** (0.015) [0.045, 0.103]
HS Sophomore BB Athlete × Black				-0.011 (0.131) [-0.268, 0.247]		
HS Non BB Varsity Athlete × Black				-0.137** (0.052) [-0.240, -0.035]		
HS Sophomore BB Athlete × Income Below Poverty Line					-0.066 (0.132) [-0.326, 0.194]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.038 (0.052) [-0.065, 0.141]	
HS Sophomore BB Athlete × Single-Parent Household						0.054 (0.099) [-0.140, 0.247]
HS Non BB Varsity Athlete × Single-Parent Household						0.033 (0.031) [-0.028, 0.094]
Single-Parent Household	-0.008 (0.016) [-0.040, 0.024]	-0.010 (0.016) [-0.042, 0.022]	-0.025 (0.023) [-0.069, 0.020]	-0.008 (0.016) [-0.040, 0.024]	-0.010 (0.016) [-0.042, 0.022]	-0.025 (0.023) [-0.069, 0.020]
Family Income (\$10K)	0.001 (0.002) [-0.002, 0.004]	0.002 (0.002) [-0.001, 0.005]	0.002 (0.002) [-0.001, 0.005]	0.001 (0.002) [-0.002, 0.004]	0.002 (0.002) [-0.001, 0.005]	0.002 (0.002) [-0.001, 0.005]
Family Income Below Poverty Line	-0.051 (0.026) [-0.102, 0.000]	-0.059 (0.031) [-0.120, 0.002]	-0.051 (0.026) [-0.102, 0.000]	-0.052* (0.026) [-0.103, -0.001]	-0.059 (0.031) [-0.120, 0.002]	-0.051 (0.026) [-0.102, 0.001]
Number of Siblings	-0.014** (0.005) [-0.024, -0.005]	-0.014** (0.005) [-0.023, -0.005]	-0.014** (0.005) [-0.023, -0.005]	-0.014** (0.005) [-0.023, -0.005]	-0.014** (0.005) [-0.023, -0.005]	-0.014** (0.005) [-0.023, -0.005]

**TABLE RBFO\_N2.2B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.013*** (0.003) [0.008, 0.019]	0.014*** (0.003) [0.008, 0.019]	0.014*** (0.003) [0.008, 0.019]	0.013*** (0.003) [0.008, 0.019]	0.014*** (0.003) [0.008, 0.019]	0.014*** (0.003) [0.008, 0.019]
Mother Education	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]
Urban Location	0.024 (0.015) [-0.005, 0.052]	0.024 (0.015) [-0.005, 0.053]	0.024 (0.015) [-0.005, 0.053]	0.024 (0.015) [-0.005, 0.052]	0.024 (0.015) [-0.005, 0.053]	0.024 (0.015) [-0.005, 0.052]
Cognitive Ability (Z-Score)	0.104*** (0.008) [0.089, 0.119]	0.104*** (0.008) [0.089, 0.120]	0.104*** (0.008) [0.089, 0.120]	0.104*** (0.008) [0.089, 0.120]	0.104*** (0.008) [0.089, 0.120]	0.104*** (0.008) [0.089, 0.120]
Locus of Control	0.036* (0.014) [0.008, 0.064]	0.037** (0.014) [0.009, 0.065]	0.037** (0.014) [0.009, 0.065]	0.036* (0.014) [0.009, 0.064]	0.037** (0.014) [0.009, 0.065]	0.037** (0.014) [0.009, 0.065]
Self Concept	0.007 (0.012) [-0.016, 0.031]	0.008 (0.012) [-0.016, 0.031]	0.008 (0.012) [-0.016, 0.031]	0.007 (0.012) [-0.016, 0.031]	0.008 (0.012) [-0.016, 0.031]	0.008 (0.012) [-0.016, 0.031]
Non-Cognitive Ability (EXTERNAL)	0.119*** (0.026) [0.069, 0.169]	0.121*** (0.026) [0.071, 0.171]	0.121*** (0.026) [0.071, 0.171]	0.119*** (0.026) [0.069, 0.170]	0.121*** (0.026) [0.071, 0.171]	0.121*** (0.026) [0.071, 0.171]
Black - not Hispanic	0.146*** (0.032) [0.083, 0.208]	0.099*** (0.026) [0.048, 0.150]	0.099*** (0.026) [0.048, 0.149]	0.146*** (0.032) [0.084, 0.208]	0.100*** (0.026) [0.049, 0.151]	0.099*** (0.026) [0.048, 0.150]
American Indian or Alaska Native	-0.145 (0.083) [-0.307, 0.017]	-0.143 (0.083) [-0.305, 0.019]	-0.145 (0.083) [-0.308, 0.018]	-0.144 (0.083) [-0.306, 0.018]	-0.143 (0.083) [-0.305, 0.019]	-0.146 (0.083) [-0.308, 0.017]
Asian or Pacific Islander	0.041 (0.025) [-0.007, 0.089]	0.039 (0.025) [-0.009, 0.088]	0.039 (0.025) [-0.009, 0.087]	0.041 (0.025) [-0.007, 0.089]	0.039 (0.025) [-0.009, 0.087]	0.039 (0.025) [-0.009, 0.087]
Hispanic or Latino	0.074** (0.023) [0.030, 0.119]	0.073** (0.023) [0.029, 0.118]	0.073** (0.023) [0.028, 0.117]	0.075** (0.023) [0.030, 0.119]	0.073** (0.023) [0.028, 0.118]	0.073** (0.023) [0.028, 0.118]
Constant	-0.054 (0.106) [-0.261, 0.154]	-0.055 (0.106) [-0.263, 0.152]	-0.054 (0.106) [-0.261, 0.154]	-0.053 (0.106) [-0.260, 0.155]	-0.056 (0.106) [-0.264, 0.152]	-0.053 (0.106) [-0.261, 0.155]
Observations	3,690	3,690	3,690	3,690	3,690	3,690
Adjusted R-squared	0.174	0.172	0.173	0.173	0.172	0.172

**TABLE RBFO\_N2.2B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.033 (0.049)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.105* (0.049)				
Incremental Effect of HS Athletics for Single-Parent Household			0.107*** (0.028)			
Incremental Effect of HS BB Athletics for Blacks				0.060 (0.124)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.015 (0.125)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.109 (0.087)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N2.3A: College Attendance

**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.132*** (0.016) [0.101 , 0.162]	
High School Sophomore BB/FB Varsity Athlete			0.078*** (0.023) [0.032 , 0.124]
High School Sophomore Non BB/FB Varsity Athlete			0.149*** (0.017) [0.116 , 0.181]
Single-Parent Household	-0.054** (0.018) [-0.090 , -0.018]	-0.049** (0.018) [-0.084 , -0.013]	-0.048** (0.018) [-0.083 , -0.012]
Family Income (\$10K)	0.013*** (0.002) [0.009 , 0.017]	0.012*** (0.002) [0.008 , 0.016]	0.012*** (0.002) [0.008 , 0.016]
Family Income Below Poverty Line	-0.011 (0.028) [-0.066 , 0.044]	-0.004 (0.028) [-0.059 , 0.050]	-0.003 (0.028) [-0.057 , 0.052]
Number of Siblings	-0.008 (0.005) [-0.018 , 0.003]	-0.008 (0.005) [-0.018 , 0.003]	-0.008 (0.005) [-0.018 , 0.003]
Father Education	0.026*** (0.004) [0.018 , 0.033]	0.023*** (0.004) [0.016 , 0.031]	0.023*** (0.004) [0.016 , 0.030]
Mother Education	0.017*** (0.004) [0.009 , 0.025]	0.016*** (0.004) [0.008 , 0.024]	0.016*** (0.004) [0.008 , 0.024]
Urban Location	0.034 (0.018) [-0.001 , 0.069]	0.039* (0.018) [0.004 , 0.074]	0.039* (0.018) [0.004 , 0.074]
Cognitive Ability (Z-Score)	0.151*** (0.008) [0.135 , 0.167]	0.153*** (0.008) [0.137 , 0.168]	0.151*** (0.008) [0.135 , 0.167]

## TABLE RBFO\_N2.3A: College Attendance

**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.041** (0.016) [0.010, 0.072]	0.040* (0.015) [0.009, 0.070]	0.040** (0.015) [0.010, 0.070]
Self Concept	0.008 (0.014) [-0.019, 0.036]	0.002 (0.014) [-0.026, 0.029]	0.000 (0.014) [-0.027, 0.028]
Non-Cognitive Ability (EXTERNAL)	0.154*** (0.021) [0.113, 0.194]	0.147*** (0.021) [0.107, 0.188]	0.145*** (0.021) [0.105, 0.185]
Black - not Hispanic	0.173*** (0.035) [0.104, 0.243]	0.166*** (0.035) [0.097, 0.235]	0.172*** (0.035) [0.103, 0.241]
American Indian or Alaska Native	-0.073 (0.084) [-0.236, 0.091]	-0.076 (0.082) [-0.237, 0.085]	-0.079 (0.082) [-0.240, 0.081]
Asian or Pacific Islander	0.010 (0.034) [-0.055, 0.076]	0.017 (0.033) [-0.048, 0.083]	0.015 (0.033) [-0.051, 0.081]
Hispanic or Latino	0.019 (0.026) [-0.033, 0.070]	0.010 (0.026) [-0.041, 0.061]	0.007 (0.026) [-0.044, 0.058]
Constant	-0.759*** (0.090) [-0.936, -0.582]	-0.771*** (0.089) [-0.946, -0.596]	-0.753*** (0.089) [-0.928, -0.578]
Observations	3,250	3,250	3,250
Adjusted R-squared	0.284	0.299	0.301

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N2.3B: College Attendance**

**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.134*** (0.016) [0.103, 0.166]	0.135*** (0.016) [0.103, 0.168]	0.137*** (0.018) [0.102, 0.172]			
HS Sophomore Athlete × Black	-0.043 (0.069) [-0.177, 0.092]					
HS Sophomore Athlete × Income Below Poverty Line		-0.039 (0.050) [-0.137, 0.060]				
HS Sophomore Athlete × Single-Parent Household			-0.022 (0.036) [-0.093, 0.048]			
High School Sophomore BB/FB Varsity Athlete				0.074** (0.024) [0.026, 0.121]	0.075** (0.025) [0.026, 0.123]	0.082** (0.027) [0.029, 0.136]
High School Sophomore Non BB/FB Varsity Athlete				0.152*** (0.017) [0.119, 0.186]	0.154*** (0.017) [0.119, 0.188]	0.153*** (0.019) [0.116, 0.190]
HS Sophomore BB/FB Athlete × Black				0.029 (0.091) [-0.149, 0.206]		
HS Non BB/FB Varsity Athlete × Black				-0.068 (0.075) [-0.216, 0.080]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					0.032 (0.074) [-0.113, 0.177]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.061 (0.057) [-0.172, 0.050]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.017 (0.053) [-0.122, 0.088]
HS Non BB/FB Varsity Athlete × Single-Parent Household						-0.019 (0.038) [-0.094, 0.057]
Single-Parent Household	-0.049** (0.018) [-0.084, -0.013]	-0.049** (0.018) [-0.084, -0.013]	-0.036 (0.027) [-0.090, 0.018]	-0.048** (0.018) [-0.083, -0.012]	-0.048** (0.018) [-0.084, -0.013]	-0.037 (0.027) [-0.091, 0.017]
Family Income (\$10K)	0.012*** (0.002) [0.008, 0.016]	0.012*** (0.002) [0.008, 0.016]	0.012*** (0.002) [0.008, 0.016]	0.012*** (0.002) [0.008, 0.016]	0.012*** (0.002) [0.008, 0.016]	0.012*** (0.002) [0.008, 0.016]
Family Income Below Poverty Line	-0.004 (0.028) [-0.059, 0.051]	0.016 (0.036) [-0.054, 0.086]	-0.005 (0.028) [-0.059, 0.050]	-0.004 (0.028) [-0.058, 0.051]	0.013 (0.036) [-0.057, 0.083]	-0.003 (0.028) [-0.058, 0.052]
Number of Siblings	-0.008 (0.005) [-0.018, 0.003]	-0.008 (0.005) [-0.018, 0.003]	-0.008 (0.005) [-0.018, 0.003]	-0.008 (0.005) [-0.018, 0.003]	-0.008 (0.005) [-0.018, 0.003]	-0.008 (0.005) [-0.018, 0.003]

**TABLE RBFO\_N2.3B: College Attendance**  
**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.023*** (0.004) [0.016, 0.031]	0.023*** (0.004) [0.016, 0.031]	0.023*** (0.004) [0.016, 0.031]	0.023*** (0.004) [0.016, 0.031]	0.023*** (0.004) [0.016, 0.030]	0.023*** (0.004) [0.016, 0.030]
Mother Education	0.016*** (0.004) [0.008, 0.024]	0.016*** (0.004) [0.008, 0.024]	0.016*** (0.004) [0.008, 0.024]	0.016*** (0.004) [0.008, 0.024]	0.016*** (0.004) [0.008, 0.024]	0.016*** (0.004) [0.008, 0.024]
Urban Location	0.040* (0.018) [0.005, 0.075]	0.039* (0.018) [0.004, 0.074]	0.039* (0.018) [0.004, 0.074]	0.039* (0.018) [0.004, 0.074]	0.040* (0.018) [0.005, 0.074]	0.039* (0.018) [0.004, 0.074]
Cognitive Ability (Z-Score)	0.152*** (0.008) [0.137, 0.168]	0.153*** (0.008) [0.137, 0.169]	0.152*** (0.008) [0.137, 0.168]	0.150*** (0.008) [0.134, 0.166]	0.151*** (0.008) [0.135, 0.167]	0.151*** (0.008) [0.135, 0.167]
Locus of Control	0.040* (0.015) [0.009, 0.070]	0.039* (0.015) [0.009, 0.070]	0.039* (0.015) [0.009, 0.069]	0.040** (0.015) [0.010, 0.070]	0.040** (0.015) [0.010, 0.070]	0.039* (0.015) [0.009, 0.069]
Self Concept	0.001 (0.014) [-0.026, 0.029]	0.001 (0.014) [-0.026, 0.029]	0.002 (0.014) [-0.026, 0.029]	-0.000 (0.014) [-0.028, 0.027]	-0.000 (0.014) [-0.028, 0.027]	0.001 (0.014) [-0.027, 0.028]
Non-Cognitive Ability (EXTERNAL)	0.147*** (0.021) [0.107, 0.188]	0.147*** (0.021) [0.107, 0.188]	0.148*** (0.021) [0.107, 0.188]	0.145*** (0.021) [0.104, 0.185]	0.144*** (0.021) [0.104, 0.185]	0.145*** (0.021) [0.105, 0.186]
Black - not Hispanic	0.193*** (0.054) [0.087, 0.300]	0.167*** (0.035) [0.098, 0.236]	0.167*** (0.035) [0.098, 0.236]	0.192*** (0.054) [0.085, 0.298]	0.171*** (0.035) [0.102, 0.240]	0.173*** (0.035) [0.104, 0.242]
American Indian or Alaska Native	-0.076 (0.082) [-0.237, 0.085]	-0.074 (0.082) [-0.235, 0.088]	-0.076 (0.082) [-0.237, 0.085]	-0.079 (0.082) [-0.239, 0.081]	-0.083 (0.083) [-0.245, 0.079]	-0.080 (0.082) [-0.240, 0.081]
Asian or Pacific Islander	0.017 (0.033) [-0.048, 0.083]	0.017 (0.033) [-0.049, 0.082]	0.017 (0.033) [-0.049, 0.083]	0.014 (0.034) [-0.051, 0.080]	0.015 (0.033) [-0.051, 0.080]	0.015 (0.034) [-0.051, 0.080]
Hispanic or Latino	0.010 (0.026) [-0.041, 0.061]	0.010 (0.026) [-0.042, 0.061]	0.010 (0.026) [-0.041, 0.061]	0.007 (0.026) [-0.044, 0.058]	0.007 (0.026) [-0.044, 0.058]	0.007 (0.026) [-0.044, 0.058]
Constant	-0.772*** (0.089) [-0.946, -0.597]	-0.772*** (0.089) [-0.946, -0.597]	-0.776*** (0.089) [-0.950, -0.601]	-0.756*** (0.089) [-0.931, -0.581]	-0.752*** (0.089) [-0.927, -0.577]	-0.757*** (0.089) [-0.932, -0.582]
Observations	3,250	3,250	3,250	3,250	3,250	3,250
Adjusted R-squared	0.299	0.299	0.299	0.301	0.301	0.301

**TABLE RBFO\_N2.3B: College Attendance**  
**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.092 (0.067)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.097* (0.048)				
Incremental Effect of HS Athletics for Single-Parent Household			0.115*** (0.032)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.102 (0.087)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.106 (0.070)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.065 (0.046)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.



## TABLE RBFO\_N2.4A: College Attendance

**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.091*** (0.015) [0.063 , 0.120]	
High School Sophomore BB Varsity Athlete			0.050 (0.043) [-0.036 , 0.135]
High School Sophomore Non BB Varsity Athlete			0.094*** (0.015) [0.065 , 0.123]
Single-Parent Household	-0.051** (0.017) [-0.084 , -0.018]	-0.048** (0.017) [-0.081 , -0.015]	-0.048** (0.017) [-0.081 , -0.015]
Family Income (\$10K)	0.009*** (0.002) [0.006 , 0.013]	0.008*** (0.002) [0.004 , 0.012]	0.008*** (0.002) [0.004 , 0.012]
Family Income Below Poverty Line	0.019 (0.024) [-0.029 , 0.066]	0.024 (0.024) [-0.023 , 0.070]	0.024 (0.024) [-0.022 , 0.071]
Number of Siblings	-0.010* (0.005) [-0.019 , -0.000]	-0.010* (0.005) [-0.020 , -0.001]	-0.010* (0.005) [-0.020 , -0.001]
Father Education	0.020*** (0.003) [0.014 , 0.027]	0.020*** (0.003) [0.013 , 0.027]	0.020*** (0.003) [0.013 , 0.026]
Mother Education	0.019*** (0.004) [0.011 , 0.026]	0.017*** (0.004) [0.009 , 0.024]	0.017*** (0.004) [0.009 , 0.024]
Urban Location	0.040* (0.016) [0.008 , 0.072]	0.045** (0.016) [0.013 , 0.076]	0.044** (0.016) [0.012 , 0.076]
Cognitive Ability (Z-Score)	0.194*** (0.008) [0.178 , 0.211]	0.192*** (0.008) [0.176 , 0.209]	0.192*** (0.008) [0.176 , 0.208]

## TABLE RBFO\_N2.4A: College Attendance

**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.030* (0.015) [0.001, 0.060]	0.028 (0.015) [-0.001, 0.057]	0.028 (0.015) [-0.001, 0.058]
Self Concept	0.031* (0.013) [0.006, 0.057]	0.026* (0.013) [0.001, 0.052]	0.026* (0.013) [0.001, 0.051]
Non-Cognitive Ability (EXTERNAL)	0.169*** (0.023) [0.124, 0.215]	0.161*** (0.023) [0.116, 0.207]	0.161*** (0.023) [0.116, 0.206]
Black - not Hispanic	0.146*** (0.027) [0.093, 0.200]	0.154*** (0.027) [0.100, 0.207]	0.155*** (0.027) [0.101, 0.208]
American Indian or Alaska Native	-0.089 (0.065) [-0.217, 0.039]	-0.092 (0.067) [-0.223, 0.039]	-0.090 (0.066) [-0.220, 0.040]
Asian or Pacific Islander	0.019 (0.030) [-0.040, 0.079]	0.029 (0.031) [-0.032, 0.089]	0.029 (0.031) [-0.032, 0.089]
Hispanic or Latino	0.029 (0.023) [-0.017, 0.074]	0.034 (0.023) [-0.012, 0.079]	0.034 (0.023) [-0.012, 0.079]
Constant	-0.726*** (0.099) [-0.921, -0.531]	-0.705*** (0.099) [-0.898, -0.511]	-0.703*** (0.099) [-0.896, -0.509]
Observations	3,690	3,690	3,690
Adjusted R-squared	0.313	0.320	0.320

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N2.4B: College Attendance**

**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.099*** (0.015) [0.069, 0.128]	0.081*** (0.015) [0.051, 0.111]	0.075*** (0.016) [0.042, 0.107]			
HS Sophomore Athlete × Black	-0.092 (0.053) [-0.197, 0.012]					
HS Sophomore Athlete × Income Below Poverty Line		0.102* (0.049) [0.005, 0.198]				
HS Sophomore Athlete × Single-Parent Household			0.066* (0.032) [0.003, 0.130]			
High School Sophomore BB Varsity Athlete				0.040 (0.047) [-0.051, 0.131]	0.037 (0.048) [-0.056, 0.131]	0.031 (0.051) [-0.070, 0.131]
High School Sophomore Non BB Varsity Athlete				0.102*** (0.015) [0.072, 0.132]	0.084*** (0.015) [0.053, 0.114]	0.077*** (0.017) [0.044, 0.110]
HS Sophomore BB Athlete × Black				0.072 (0.129) [-0.180, 0.324]		
HS Non BB Varsity Athlete × Black				-0.109* (0.055) [-0.217, -0.001]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.080 (0.114) [-0.145, 0.304]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.109* (0.052) [0.006, 0.211]	
HS Sophomore BB Athlete × Single-Parent Household						0.067 (0.097) [-0.123, 0.256]
HS Non BB Varsity Athlete × Single-Parent Household						0.067* (0.033) [0.003, 0.132]
Single-Parent Household	-0.047** (0.017) [-0.080, -0.014]	-0.049** (0.017) [-0.082, -0.016]	-0.077*** (0.022) [-0.119, -0.035]	-0.047** (0.017) [-0.080, -0.014]	-0.049** (0.017) [-0.082, -0.016]	-0.077*** (0.022) [-0.120, -0.035]
Family Income (\$10K)	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.005, 0.012]	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]
Family Income Below Poverty Line	0.024 (0.024) [-0.023, 0.070]	-0.008 (0.026) [-0.059, 0.044]	0.025 (0.024) [-0.022, 0.071]	0.023 (0.024) [-0.024, 0.069]	-0.008 (0.026) [-0.059, 0.043]	0.025 (0.024) [-0.021, 0.072]
Number of Siblings	-0.011* (0.005) [-0.020, -0.001]	-0.010* (0.005) [-0.020, -0.001]	-0.010* (0.005) [-0.020, -0.001]	-0.010* (0.005) [-0.020, -0.001]	-0.010* (0.005) [-0.020, -0.001]	-0.010* (0.005) [-0.019, -0.001]

**TABLE RBFO\_N2.4B: College Attendance**  
**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.020*** (0.003) [0.013, 0.027]	0.020*** (0.003) [0.013, 0.027]	0.020*** (0.003) [0.013, 0.027]	0.020*** (0.003) [0.013, 0.026]	0.020*** (0.003) [0.013, 0.027]	0.020*** (0.003) [0.013, 0.027]
Mother Education	0.017*** (0.004) [0.009, 0.024]	0.017*** (0.004) [0.010, 0.024]	0.017*** (0.004) [0.009, 0.024]	0.017*** (0.004) [0.009, 0.024]	0.017*** (0.004) [0.009, 0.024]	0.017*** (0.004) [0.009, 0.024]
Urban Location	0.045** (0.016) [0.013, 0.077]	0.046** (0.016) [0.014, 0.078]	0.045** (0.016) [0.013, 0.077]	0.044** (0.016) [0.012, 0.076]	0.045** (0.016) [0.013, 0.077]	0.044** (0.016) [0.012, 0.076]
Cognitive Ability (Z-Score)	0.192*** (0.008) [0.176, 0.208]	0.192*** (0.008) [0.175, 0.208]	0.192*** (0.008) [0.176, 0.208]	0.192*** (0.008) [0.176, 0.208]	0.192*** (0.008) [0.175, 0.208]	0.192*** (0.008) [0.176, 0.208]
Locus of Control	0.028 (0.015) [-0.002, 0.057]	0.028 (0.015) [-0.001, 0.057]	0.028 (0.015) [-0.001, 0.057]	0.028 (0.015) [-0.001, 0.057]	0.028 (0.015) [-0.001, 0.058]	0.028 (0.015) [-0.001, 0.058]
Self Concept	0.026* (0.013) [0.001, 0.051]	0.027* (0.013) [0.002, 0.052]	0.027* (0.013) [0.002, 0.052]	0.026* (0.013) [0.001, 0.051]	0.027* (0.013) [0.002, 0.052]	0.027* (0.013) [0.002, 0.052]
Non-Cognitive Ability (EXTERNAL)	0.160*** (0.023) [0.115, 0.206]	0.161*** (0.023) [0.116, 0.206]	0.162*** (0.023) [0.116, 0.207]	0.160*** (0.023) [0.115, 0.206]	0.161*** (0.023) [0.116, 0.206]	0.161*** (0.023) [0.116, 0.207]
Black - not Hispanic	0.188*** (0.034) [0.122, 0.254]	0.150*** (0.028) [0.096, 0.204]	0.151*** (0.027) [0.097, 0.205]	0.188*** (0.034) [0.122, 0.254]	0.152*** (0.028) [0.097, 0.206]	0.152*** (0.028) [0.098, 0.206]
American Indian or Alaska Native	-0.092 (0.067) [-0.223, 0.039]	-0.086 (0.067) [-0.216, 0.045]	-0.092 (0.068) [-0.225, 0.041]	-0.089 (0.066) [-0.219, 0.041]	-0.083 (0.066) [-0.213, 0.046]	-0.091 (0.067) [-0.222, 0.041]
Asian or Pacific Islander	0.030 (0.031) [-0.031, 0.090]	0.026 (0.031) [-0.034, 0.086]	0.027 (0.031) [-0.034, 0.087]	0.030 (0.031) [-0.031, 0.090]	0.026 (0.031) [-0.034, 0.086]	0.027 (0.031) [-0.034, 0.088]
Hispanic or Latino	0.034 (0.023) [-0.011, 0.079]	0.032 (0.023) [-0.013, 0.078]	0.032 (0.023) [-0.013, 0.077]	0.035 (0.023) [-0.011, 0.080]	0.032 (0.023) [-0.013, 0.077]	0.032 (0.023) [-0.013, 0.077]
Constant	-0.703*** (0.099) [-0.897, -0.510]	-0.703*** (0.099) [-0.896, -0.509]	-0.700*** (0.099) [-0.894, -0.507]	-0.701*** (0.098) [-0.894, -0.507]	-0.700*** (0.099) [-0.894, -0.507]	-0.698*** (0.099) [-0.891, -0.504]
Observations	3,690	3,690	3,690	3,690	3,690	3,690
Adjusted R-squared	0.321	0.321	0.321	0.321	0.321	0.321

**TABLE RBFO\_N2.4B: College Attendance**  
**Dependent Variable: Attended 4-Year PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.006 (0.051)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.183*** (0.047)				
Incremental Effect of HS Athletics for Single-Parent Household			0.141*** (0.029)			
Incremental Effect of HS BB Athletics for Blacks				0.112 (0.120)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.117 (0.104)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.097 (0.082)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N2.5A: Division 1 College Attendance

**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.055*** (0.014) [0.026 , 0.083]	
High School Sophomore BB/FB Varsity Athlete			0.031 (0.021) [-0.009 , 0.072]
High School Sophomore Non BB/FB Varsity Athlete			0.062*** (0.016) [0.031 , 0.093]
Single-Parent Household	-0.024 (0.016) [-0.056 , 0.008]	-0.022 (0.016) [-0.054 , 0.010]	-0.021 (0.016) [-0.054 , 0.011]
Family Income (\$10K)	0.012*** (0.003) [0.007 , 0.018]	0.012*** (0.003) [0.007 , 0.017]	0.012*** (0.003) [0.007 , 0.017]
Family Income Below Poverty Line	0.021 (0.023) [-0.023 , 0.066]	0.024 (0.023) [-0.021 , 0.069]	0.025 (0.023) [-0.020 , 0.070]
Number of Siblings	0.001 (0.005) [-0.009 , 0.010]	0.001 (0.005) [-0.009 , 0.010]	0.001 (0.005) [-0.009 , 0.010]
Father Education	0.019*** (0.004) [0.012 , 0.026]	0.018*** (0.004) [0.011 , 0.025]	0.018*** (0.004) [0.010 , 0.025]
Mother Education	0.012** (0.004) [0.004 , 0.020]	0.012** (0.004) [0.004 , 0.019]	0.011** (0.004) [0.004 , 0.019]
Urban Location	0.061*** (0.018) [0.025 , 0.098]	0.064*** (0.018) [0.028 , 0.100]	0.063*** (0.018) [0.027 , 0.100]
Cognitive Ability (Z-Score)	0.098*** (0.008) [0.082 , 0.114]	0.098*** (0.008) [0.082 , 0.114]	0.098*** (0.008) [0.081 , 0.114]

## TABLE RBFO\_N2.5A: Division 1 College Attendance

**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model  
Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.017 (0.014) [-0.011, 0.045]	0.017 (0.014) [-0.011, 0.044]	0.017 (0.014) [-0.011, 0.044]
Self Concept	0.023 (0.013) [-0.003, 0.049]	0.020 (0.013) [-0.006, 0.046]	0.019 (0.013) [-0.007, 0.045]
Non-Cognitive Ability (EXTERNAL)	0.088*** (0.016) [0.057, 0.118]	0.085*** (0.016) [0.055, 0.116]	0.084*** (0.015) [0.054, 0.114]
Black - not Hispanic	0.097** (0.032) [0.033, 0.161]	0.094** (0.033) [0.030, 0.158]	0.097** (0.033) [0.033, 0.161]
American Indian or Alaska Native	0.010 (0.071) [-0.129, 0.149]	0.009 (0.071) [-0.131, 0.148]	0.007 (0.071) [-0.132, 0.146]
Asian or Pacific Islander	0.080* (0.036) [0.010, 0.150]	0.083* (0.036) [0.013, 0.153]	0.082* (0.036) [0.012, 0.152]
Hispanic or Latino	0.035 (0.023) [-0.010, 0.080]	0.031 (0.023) [-0.014, 0.076]	0.030 (0.023) [-0.015, 0.075]
Constant	-0.595*** (0.077) [-0.745, -0.445]	-0.600*** (0.076) [-0.749, -0.451]	-0.592*** (0.076) [-0.741, -0.444]
Observations	3,250	3,250	3,250
Adjusted R-squared	0.175	0.178	0.178

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N2.5B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.060*** (0.015) [0.031, 0.089]	0.061*** (0.016) [0.031, 0.092]	0.046** (0.017) [0.013, 0.079]			
HS Sophomore Athlete × Black	-0.087 (0.062) [-0.209, 0.036]					
HS Sophomore Athlete × Income Below Poverty Line		-0.067 (0.041) [-0.147, 0.013]				
HS Sophomore Athlete × Single-Parent Household			0.038 (0.032) [-0.024, 0.100]			
High School Sophomore BB/FB Varsity Athlete				0.038 (0.022) [-0.005, 0.080]	0.036 (0.022) [-0.009, 0.080]	0.029 (0.025) [-0.020, 0.077]
High School Sophomore Non BB/FB Varsity Athlete				0.067*** (0.016) [0.035, 0.098]	0.069*** (0.017) [0.036, 0.102]	0.051** (0.018) [0.016, 0.087]
HS Sophomore BB/FB Athlete × Black				-0.081 (0.077) [-0.232, 0.069]		
HS Non BB/FB Varsity Athlete × Black				-0.082 (0.072) [-0.223, 0.059]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					-0.035 (0.056) [-0.144, 0.074]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.078 (0.046) [-0.169, 0.013]	
HS Sophomore BB/FB Athlete × Single-Parent Household						0.011 (0.044) [-0.076, 0.097]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.050 (0.035) [-0.019, 0.119]
Single-Parent Household	-0.021 (0.016) [-0.053, 0.011]	-0.022 (0.016) [-0.054, 0.010]	-0.044* (0.023) [-0.089, -0.000]	-0.021 (0.016) [-0.053, 0.011]	-0.022 (0.016) [-0.054, 0.011]	-0.045* (0.023) [-0.089, -0.001]
Family Income (\$10K)	0.012*** (0.003) [0.007, 0.017]	0.012*** (0.003) [0.007, 0.017]	0.012*** (0.003) [0.007, 0.018]	0.012*** (0.003) [0.007, 0.017]	0.012*** (0.003) [0.007, 0.017]	0.012*** (0.003) [0.007, 0.017]
Family Income Below Poverty Line	0.024 (0.023) [-0.020, 0.069]	0.059* (0.030) [0.000, 0.118]	0.025 (0.023) [-0.020, 0.070]	0.025 (0.023) [-0.020, 0.070]	0.058 (0.030) [-0.001, 0.117]	0.026 (0.023) [-0.019, 0.071]
Number of Siblings	0.000 (0.005) [-0.009, 0.010]	0.000 (0.005) [-0.009, 0.010]	0.001 (0.005) [-0.009, 0.010]	0.000 (0.005) [-0.009, 0.010]	0.000 (0.005) [-0.009, 0.010]	0.001 (0.005) [-0.009, 0.010]



**TABLE RBFO\_N2.5B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.018*** (0.004) [0.011, 0.025]	0.018*** (0.004) [0.011, 0.025]	0.018*** (0.004) [0.011, 0.025]	0.018*** (0.004) [0.010, 0.025]	0.018*** (0.004) [0.010, 0.025]	0.018*** (0.004) [0.010, 0.025]
Mother Education	0.012** (0.004) [0.004, 0.019]	0.012** (0.004) [0.004, 0.019]	0.012** (0.004) [0.004, 0.019]	0.011** (0.004) [0.004, 0.019]	0.012** (0.004) [0.004, 0.019]	0.011** (0.004) [0.004, 0.019]
Urban Location	0.064*** (0.018) [0.028, 0.100]	0.063*** (0.018) [0.027, 0.099]	0.064*** (0.018) [0.028, 0.100]	0.064*** (0.018) [0.028, 0.100]	0.063*** (0.018) [0.027, 0.100]	0.064*** (0.018) [0.028, 0.100]
Cognitive Ability (Z-Score)	0.098*** (0.008) [0.082, 0.114]	0.099*** (0.008) [0.083, 0.115]	0.099*** (0.008) [0.082, 0.115]	0.097*** (0.008) [0.081, 0.114]	0.098*** (0.008) [0.082, 0.114]	0.098*** (0.008) [0.081, 0.114]
Locus of Control	0.017 (0.014) [-0.011, 0.044]	0.016 (0.014) [-0.011, 0.044]	0.017 (0.014) [-0.011, 0.045]	0.017 (0.014) [-0.011, 0.044]	0.017 (0.014) [-0.011, 0.044]	0.017 (0.014) [-0.011, 0.045]
Self Concept	0.020 (0.013) [-0.006, 0.046]	0.020 (0.013) [-0.006, 0.046]	0.020 (0.013) [-0.006, 0.046]	0.019 (0.013) [-0.007, 0.045]	0.019 (0.013) [-0.007, 0.045]	0.019 (0.013) [-0.007, 0.045]
Non-Cognitive Ability (EXTERNAL)	0.085*** (0.015) [0.055, 0.115]	0.085*** (0.016) [0.054, 0.115]	0.085*** (0.016) [0.054, 0.115]	0.084*** (0.015) [0.054, 0.114]	0.084*** (0.015) [0.053, 0.114]	0.084*** (0.015) [0.053, 0.114]
Black - not Hispanic	0.150** (0.049) [0.054, 0.246]	0.096** (0.033) [0.032, 0.160]	0.093** (0.033) [0.029, 0.156]	0.149** (0.049) [0.053, 0.246]	0.098** (0.033) [0.034, 0.161]	0.096** (0.033) [0.032, 0.160]
American Indian or Alaska Native	0.008 (0.071) [-0.131, 0.148]	0.012 (0.071) [-0.126, 0.151]	0.009 (0.071) [-0.131, 0.149]	0.007 (0.071) [-0.132, 0.146]	0.008 (0.071) [-0.131, 0.147]	0.006 (0.072) [-0.135, 0.146]
Asian or Pacific Islander	0.083* (0.036) [0.013, 0.153]	0.082* (0.036) [0.012, 0.152]	0.083* (0.036) [0.013, 0.153]	0.082* (0.036) [0.012, 0.152]	0.081* (0.036) [0.011, 0.151]	0.082* (0.036) [0.012, 0.152]
Hispanic or Latino	0.031 (0.023) [-0.014, 0.076]	0.031 (0.023) [-0.014, 0.076]	0.031 (0.023) [-0.014, 0.076]	0.030 (0.023) [-0.015, 0.075]	0.030 (0.023) [-0.016, 0.075]	0.030 (0.023) [-0.015, 0.075]
Constant	-0.602*** (0.076) [-0.750, -0.453]	-0.602*** (0.076) [-0.750, -0.453]	-0.591*** (0.076) [-0.741, -0.442]	-0.594*** (0.075) [-0.742, -0.446]	-0.593*** (0.076) [-0.742, -0.445]	-0.583*** (0.076) [-0.732, -0.435]
Observations	3,250	3,250	3,250	3,250	3,250	3,250
Adjusted R-squared	0.178	0.178	0.178	0.178	0.178	0.178

**TABLE RBFO\_N2.5B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.027 (0.061)					
Incremental Effect of HS Athletics for Income Below Poverty Line		-0.006 (0.038)				
Incremental Effect of HS Athletics for Single-Parent Household			0.084** (0.027)			
Incremental Effect of HS BB/FB Athletics for Blacks				-0.044 (0.074)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.001 (0.051)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.039 (0.036)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N2.6A: Division 1 College Attendance

**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.038** (0.014) [0.011 , 0.065]	
High School Sophomore BB Varsity Athlete			-0.024 (0.040) [-0.102 , 0.055]
High School Sophomore Non BB Varsity Athlete			0.042** (0.014) [0.014 , 0.069]
Single-Parent Household	-0.011 (0.015) [-0.041 , 0.019]	-0.010 (0.015) [-0.040 , 0.020]	-0.010 (0.015) [-0.040 , 0.020]
Family Income (\$10K)	0.011*** (0.003) [0.006 , 0.016]	0.011*** (0.003) [0.006 , 0.016]	0.011*** (0.003) [0.006 , 0.016]
Family Income Below Poverty Line	0.010 (0.020) [-0.029 , 0.048]	0.012 (0.020) [-0.026 , 0.050]	0.013 (0.020) [-0.026 , 0.051]
Number of Siblings	-0.001 (0.004) [-0.010 , 0.008]	-0.001 (0.004) [-0.010 , 0.007]	-0.001 (0.004) [-0.010 , 0.008]
Father Education	0.014*** (0.004) [0.007 , 0.021]	0.013*** (0.004) [0.007 , 0.020]	0.013*** (0.004) [0.006 , 0.020]
Mother Education	0.011** (0.004) [0.004 , 0.018]	0.010** (0.004) [0.003 , 0.018]	0.010** (0.004) [0.003 , 0.018]
Urban Location	0.060*** (0.017) [0.027 , 0.094]	0.062*** (0.017) [0.029 , 0.096]	0.061*** (0.017) [0.028 , 0.095]
Cognitive Ability (Z-Score)	0.114*** (0.009) [0.098 , 0.131]	0.113*** (0.009) [0.097 , 0.130]	0.113*** (0.009) [0.096 , 0.130]

## TABLE RBFO\_N2.6A: Division 1 College Attendance

**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.006 (0.014) [-0.020, 0.033]	0.005 (0.014) [-0.021, 0.032]	0.006 (0.014) [-0.021, 0.032]
Self Concept	0.030* (0.012) [0.006, 0.055]	0.028* (0.012) [0.004, 0.053]	0.028* (0.012) [0.004, 0.053]
Non-Cognitive Ability (EXTERNAL)	0.070*** (0.019) [0.032, 0.108]	0.066*** (0.019) [0.029, 0.104]	0.066*** (0.019) [0.028, 0.104]
Black - not Hispanic	0.093*** (0.026) [0.041, 0.145]	0.096*** (0.026) [0.044, 0.148]	0.098*** (0.026) [0.046, 0.149]
American Indian or Alaska Native	0.051 (0.068) [-0.082, 0.184]	0.050 (0.069) [-0.085, 0.184]	0.052 (0.068) [-0.081, 0.186]
Asian or Pacific Islander	0.147*** (0.035) [0.079, 0.216]	0.151*** (0.035) [0.083, 0.220]	0.152*** (0.035) [0.083, 0.220]
Hispanic or Latino	0.053* (0.021) [0.012, 0.094]	0.055** (0.021) [0.014, 0.096]	0.055** (0.021) [0.014, 0.096]
Constant	-0.434*** (0.086) [-0.603, -0.265]	-0.425*** (0.086) [-0.594, -0.256]	-0.422*** (0.086) [-0.591, -0.253]
Observations	3,690	3,690	3,690
Adjusted R-squared	0.173	0.175	0.175

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N2.6B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.041** (0.015) [0.012, 0.069]	0.035* (0.015) [0.006, 0.064]	0.044** (0.016) [0.012, 0.075]			
HS Sophomore Athlete × Black	-0.036 (0.052) [-0.137, 0.065]					
HS Sophomore Athlete × Income Below Poverty Line		0.026 (0.042) [-0.057, 0.109]				
HS Sophomore Athlete × Single-Parent Household			-0.024 (0.030) [-0.083, 0.036]			
High School Sophomore BB Varsity Athlete				-0.024 (0.043) [-0.108, 0.060]	-0.029 (0.045) [-0.117, 0.059]	-0.018 (0.048) [-0.113, 0.077]
High School Sophomore Non BB Varsity Athlete				0.044** (0.015) [0.015, 0.073]	0.039** (0.015) [0.009, 0.068]	0.047** (0.016) [0.015, 0.079]
HS Sophomore BB Athlete × Black				0.003 (0.119) [-0.230, 0.236]		
HS Non BB Varsity Athlete × Black				-0.036 (0.054) [-0.142, 0.070]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.036 (0.095) [-0.151, 0.222]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.031 (0.045) [-0.058, 0.119]	
HS Sophomore BB Athlete × Single-Parent Household						-0.018 (0.085) [-0.184, 0.149]
HS Non BB Varsity Athlete × Single-Parent Household						-0.023 (0.031) [-0.084, 0.038]
Single-Parent Household	-0.009 (0.015) [-0.039, 0.021]	-0.010 (0.015) [-0.040, 0.020]	0.000 (0.019) [-0.036, 0.037]	-0.009 (0.015) [-0.039, 0.021]	-0.010 (0.015) [-0.040, 0.020]	0.000 (0.019) [-0.037, 0.037]
Family Income (\$10K)	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]
Family Income Below Poverty Line	0.012 (0.020) [-0.026, 0.050]	0.004 (0.020) [-0.036, 0.044]	0.011 (0.020) [-0.027, 0.050]	0.012 (0.020) [-0.026, 0.051]	0.003 (0.020) [-0.037, 0.043]	0.012 (0.020) [-0.026, 0.051]
Number of Siblings	-0.001 (0.004) [-0.010, 0.007]	-0.001 (0.004) [-0.010, 0.007]	-0.001 (0.004) [-0.010, 0.007]	-0.001 (0.004) [-0.010, 0.008]	-0.001 (0.004) [-0.010, 0.008]	-0.001 (0.004) [-0.010, 0.007]

**TABLE RBFO\_N2.6B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.013*** (0.004) [0.007, 0.020]	0.013*** (0.004) [0.007, 0.020]	0.013*** (0.004) [0.006, 0.020]	0.013*** (0.004) [0.006, 0.020]	0.013*** (0.004) [0.006, 0.020]	0.013*** (0.004) [0.006, 0.020]
Mother Education	0.010** (0.004) [0.003, 0.018]	0.010** (0.004) [0.003, 0.018]	0.010** (0.004) [0.003, 0.018]	0.010** (0.004) [0.003, 0.018]	0.010** (0.004) [0.003, 0.018]	0.010** (0.004) [0.003, 0.018]
Urban Location	0.062*** (0.017) [0.029, 0.096]	0.062*** (0.017) [0.029, 0.096]	0.062*** (0.017) [0.028, 0.096]	0.061*** (0.017) [0.028, 0.095]	0.062*** (0.017) [0.028, 0.095]	0.061*** (0.017) [0.027, 0.095]
Cognitive Ability (Z-Score)	0.113*** (0.009) [0.097, 0.130]	0.113*** (0.009) [0.097, 0.130]	0.113*** (0.009) [0.097, 0.130]	0.113*** (0.009) [0.096, 0.130]	0.113*** (0.009) [0.096, 0.130]	0.113*** (0.009) [0.096, 0.130]
Locus of Control	0.005 (0.014) [-0.022, 0.032]	0.005 (0.014) [-0.021, 0.032]	0.005 (0.014) [-0.021, 0.032]	0.005 (0.014) [-0.021, 0.032]	0.006 (0.014) [-0.021, 0.032]	0.006 (0.014) [-0.021, 0.032]
Self Concept	0.028* (0.012) [0.004, 0.053]	0.029* (0.012) [0.004, 0.053]	0.028* (0.012) [0.004, 0.053]	0.028* (0.012) [0.004, 0.053]	0.028* (0.012) [0.004, 0.053]	0.028* (0.012) [0.004, 0.053]
Non-Cognitive Ability (EXTERNAL)	0.066*** (0.019) [0.028, 0.104]	0.066*** (0.019) [0.028, 0.104]	0.066*** (0.019) [0.029, 0.104]	0.066*** (0.019) [0.028, 0.104]	0.066*** (0.019) [0.028, 0.104]	0.066*** (0.019) [0.028, 0.104]
Black - not Hispanic	0.109*** (0.032) [0.047, 0.172]	0.095*** (0.027) [0.043, 0.147]	0.097*** (0.026) [0.045, 0.149]	0.109*** (0.032) [0.047, 0.172]	0.096*** (0.027) [0.044, 0.149]	0.098*** (0.026) [0.046, 0.150]
American Indian or Alaska Native	0.050 (0.069) [-0.085, 0.184]	0.051 (0.069) [-0.083, 0.186]	0.050 (0.068) [-0.084, 0.184]	0.053 (0.068) [-0.081, 0.186]	0.054 (0.068) [-0.079, 0.188]	0.052 (0.068) [-0.081, 0.186]
Asian or Pacific Islander	0.152*** (0.035) [0.083, 0.220]	0.151*** (0.035) [0.082, 0.219]	0.152*** (0.035) [0.083, 0.221]	0.152*** (0.035) [0.083, 0.221]	0.151*** (0.035) [0.082, 0.220]	0.152*** (0.035) [0.083, 0.221]
Hispanic or Latino	0.055** (0.021) [0.014, 0.096]	0.054** (0.021) [0.013, 0.095]	0.055** (0.021) [0.014, 0.097]	0.055** (0.021) [0.014, 0.096]	0.054** (0.021) [0.013, 0.096]	0.056** (0.021) [0.014, 0.097]
Constant	-0.425*** (0.086) [-0.594, -0.256]	-0.425*** (0.086) [-0.594, -0.256]	-0.427*** (0.086) [-0.596, -0.258]	-0.421*** (0.086) [-0.590, -0.252]	-0.421*** (0.086) [-0.590, -0.252]	-0.423*** (0.086) [-0.592, -0.255]
Observations	3,690	3,690	3,690	3,690	3,690	3,690
Adjusted R-squared	0.175	0.174	0.175	0.175	0.175	0.175

**TABLE RBFO\_N2.6B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.005 (0.049)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.062 (0.040)				
Incremental Effect of HS Athletics for Single-Parent Household			0.020 (0.026)			
Incremental Effect of HS BB Athletics for Blacks				-0.021 (0.111)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.007 (0.084)	
Incremental Effect of HS BB Athletics for Single-Parent Household						-0.036 (0.070)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N2.7A: FBS College Attendance

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.038** (0.012) [0.014 , 0.062]	
High School Sophomore BB/FB Varsity Athlete			0.033 (0.017) [-0.001 , 0.067]
High School Sophomore Non BB/FB Varsity Athlete			0.039** (0.013) [0.013 , 0.066]
Single-Parent Household	-0.023 (0.014) [-0.050 , 0.003]	-0.022 (0.014) [-0.049 , 0.005]	-0.022 (0.014) [-0.049 , 0.005]
Family Income (\$10K)	0.009*** (0.002) [0.004 , 0.014]	0.009*** (0.002) [0.004 , 0.014]	0.009*** (0.002) [0.004 , 0.014]
Family Income Below Poverty Line	0.012 (0.018) [-0.023 , 0.047]	0.014 (0.018) [-0.021 , 0.049]	0.014 (0.018) [-0.021 , 0.049]
Number of Siblings	-0.001 (0.004) [-0.009 , 0.007]	-0.001 (0.004) [-0.009 , 0.007]	-0.001 (0.004) [-0.009 , 0.007]
Father Education	0.011*** (0.003) [0.004 , 0.017]	0.010** (0.003) [0.004 , 0.016]	0.010** (0.003) [0.004 , 0.016]
Mother Education	0.008** (0.003) [0.002 , 0.015]	0.008* (0.003) [0.002 , 0.015]	0.008* (0.003) [0.002 , 0.014]
Urban Location	0.026 (0.016) [-0.005 , 0.057]	0.028 (0.016) [-0.004 , 0.059]	0.028 (0.016) [-0.004 , 0.059]
Cognitive Ability (Z-Score)	0.068*** (0.007) [0.054 , 0.082]	0.069*** (0.007) [0.054 , 0.083]	0.068*** (0.007) [0.054 , 0.083]



## TABLE RBFO\_N2.7A: FBS College Attendance

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model  
Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.008 (0.012) [-0.015 , 0.032]	0.008 (0.012) [-0.015 , 0.031]	0.008 (0.012) [-0.015 , 0.031]
Self Concept	0.013 (0.012) [-0.010 , 0.036]	0.011 (0.012) [-0.012 , 0.034]	0.011 (0.012) [-0.012 , 0.034]
Non-Cognitive Ability (EXTERNAL)	0.056*** (0.013) [0.032 , 0.081]	0.055*** (0.013) [0.030 , 0.079]	0.055*** (0.013) [0.030 , 0.079]
Black - not Hispanic	0.017 (0.024) [-0.030 , 0.063]	0.014 (0.024) [-0.033 , 0.061]	0.015 (0.024) [-0.032 , 0.062]
American Indian or Alaska Native	0.020 (0.060) [-0.098 , 0.138]	0.019 (0.061) [-0.100 , 0.138]	0.019 (0.061) [-0.101 , 0.138]
Asian or Pacific Islander	0.039 (0.033) [-0.025 , 0.103]	0.041 (0.033) [-0.023 , 0.105]	0.041 (0.033) [-0.024 , 0.105]
Hispanic or Latino	0.034 (0.020) [-0.004 , 0.073]	0.032 (0.020) [-0.007 , 0.070]	0.032 (0.020) [-0.007 , 0.070]
Constant	-0.380*** (0.065) [-0.508 , -0.253]	-0.384*** (0.065) [-0.511 , -0.257]	-0.382*** (0.065) [-0.509 , -0.255]
Observations	3,250	3,250	3,250
Adjusted R-squared	0.109	0.111	0.111

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N2.7B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.043*** (0.013) [0.018, 0.068]	0.043** (0.013) [0.017, 0.069]	0.033* (0.015) [0.004, 0.061]			
HS Sophomore Athlete × Black	-0.084 (0.046) [-0.175, 0.006]					
HS Sophomore Athlete × Income Below Poverty Line		-0.058 (0.031) [-0.118, 0.002]				
HS Sophomore Athlete × Single-Parent Household			0.021 (0.026) [-0.030, 0.071]			
High School Sophomore BB/FB Varsity Athlete				0.040* (0.019) [0.003, 0.076]	0.042* (0.019) [0.005, 0.080]	0.039 (0.022) [-0.003, 0.082]
High School Sophomore Non BB/FB Varsity Athlete				0.044** (0.014) [0.016, 0.071]	0.044** (0.014) [0.015, 0.072]	0.031* (0.016) [0.001, 0.062]
HS Sophomore BB/FB Athlete × Black				-0.085 (0.053) [-0.190, 0.019]		
HS Non BB/FB Varsity Athlete × Black				-0.082 (0.054) [-0.187, 0.023]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					-0.081* (0.034) [-0.148, -0.015]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.045 (0.037) [-0.116, 0.027]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.025 (0.033) [-0.090, 0.040]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.037 (0.029) [-0.021, 0.095]
Single-Parent Household	-0.021 (0.014) [-0.048, 0.005]	-0.022 (0.014) [-0.049, 0.005]	-0.034 (0.018) [-0.069, 0.001]	-0.021 (0.014) [-0.048, 0.005]	-0.022 (0.014) [-0.049, 0.005]	-0.034 (0.018) [-0.069, 0.000]
Family Income (\$10K)	0.009*** (0.002) [0.004, 0.014]	0.009*** (0.002) [0.004, 0.014]	0.009*** (0.002) [0.004, 0.014]	0.009*** (0.002) [0.004, 0.014]	0.009*** (0.002) [0.004, 0.014]	0.009*** (0.002) [0.004, 0.014]
Family Income Below Poverty Line	0.014 (0.018) [-0.021, 0.049]	0.044 (0.024) [-0.002, 0.091]	0.014 (0.018) [-0.020, 0.049]	0.014 (0.018) [-0.021, 0.049]	0.044 (0.024) [-0.002, 0.090]	0.015 (0.018) [-0.019, 0.050]
Number of Siblings	-0.001 (0.004) [-0.009, 0.007]	-0.001 (0.004) [-0.009, 0.007]	-0.001 (0.004) [-0.009, 0.007]	-0.001 (0.004) [-0.009, 0.007]	-0.001 (0.004) [-0.009, 0.007]	-0.001 (0.004) [-0.009, 0.007]

**TABLE RBFO\_N2.7B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]
Mother Education	0.008* (0.003) [0.002, 0.015]	0.008* (0.003) [0.002, 0.015]	0.008* (0.003) [0.002, 0.014]	0.008* (0.003) [0.002, 0.015]	0.008* (0.003) [0.002, 0.015]	0.008* (0.003) [0.002, 0.014]
Urban Location	0.028 (0.016) [-0.003, 0.059]	0.027 (0.016) [-0.004, 0.059]	0.028 (0.016) [-0.003, 0.059]	0.028 (0.016) [-0.003, 0.059]	0.027 (0.016) [-0.004, 0.058]	0.028 (0.016) [-0.003, 0.059]
Cognitive Ability (Z-Score)	0.068*** (0.007) [0.054, 0.083]	0.069*** (0.007) [0.054, 0.083]	0.069*** (0.007) [0.054, 0.083]	0.068*** (0.007) [0.054, 0.083]	0.069*** (0.007) [0.054, 0.083]	0.068*** (0.007) [0.054, 0.083]
Locus of Control	0.008 (0.012) [-0.015, 0.031]	0.008 (0.012) [-0.016, 0.031]	0.008 (0.012) [-0.015, 0.031]	0.008 (0.012) [-0.015, 0.031]	0.008 (0.012) [-0.016, 0.031]	0.008 (0.012) [-0.015, 0.032]
Self Concept	0.011 (0.012) [-0.012, 0.033]	0.011 (0.012) [-0.012, 0.034]	0.011 (0.012) [-0.012, 0.034]	0.010 (0.012) [-0.012, 0.033]	0.011 (0.012) [-0.012, 0.034]	0.011 (0.012) [-0.012, 0.034]
Non-Cognitive Ability (EXTERNAL)	0.054*** (0.013) [0.030, 0.079]	0.054*** (0.013) [0.030, 0.079]	0.054*** (0.013) [0.030, 0.079]	0.054*** (0.013) [0.030, 0.079]	0.054*** (0.013) [0.030, 0.079]	0.054*** (0.013) [0.030, 0.079]
Black - not Hispanic	0.069 (0.038) [-0.006, 0.143]	0.016 (0.024) [-0.031, 0.064]	0.014 (0.024) [-0.033, 0.061]	0.069 (0.038) [-0.006, 0.143]	0.018 (0.024) [-0.030, 0.065]	0.015 (0.024) [-0.032, 0.063]
American Indian or Alaska Native	0.019 (0.061) [-0.101, 0.138]	0.022 (0.061) [-0.097, 0.141]	0.019 (0.061) [-0.100, 0.138]	0.019 (0.061) [-0.101, 0.138]	0.024 (0.061) [-0.095, 0.143]	0.016 (0.061) [-0.104, 0.136]
Asian or Pacific Islander	0.041 (0.033) [-0.023, 0.106]	0.040 (0.033) [-0.024, 0.104]	0.041 (0.033) [-0.023, 0.106]	0.041 (0.033) [-0.023, 0.106]	0.040 (0.033) [-0.025, 0.104]	0.041 (0.033) [-0.023, 0.106]
Hispanic or Latino	0.032 (0.020) [-0.007, 0.070]	0.031 (0.020) [-0.007, 0.070]	0.032 (0.020) [-0.007, 0.070]	0.031 (0.020) [-0.007, 0.070]	0.031 (0.020) [-0.007, 0.070]	0.032 (0.020) [-0.007, 0.070]
Constant	-0.385*** (0.065) [-0.512, -0.258]	-0.385*** (0.065) [-0.512, -0.258]	-0.379*** (0.065) [-0.506, -0.252]	-0.384*** (0.065) [-0.511, -0.258]	-0.384*** (0.065) [-0.511, -0.258]	-0.378*** (0.065) [-0.505, -0.251]
Observations	3,250	3,250	3,250	3,250	3,250	3,250
Adjusted R-squared	0.112	0.111	0.111	0.111	0.111	0.111

**TABLE RBFO\_N2.7B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.042 (0.044)					
Incremental Effect of HS Athletics for Income Below Poverty Line		-0.014 (0.028)				
Incremental Effect of HS Athletics for Single-Parent Household			0.053* (0.022)			
Incremental Effect of HS BB/FB Athletics for Blacks				-0.046 (0.050)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					-0.039 (0.028)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.014 (0.026)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N2.8A: FBS College Attendance

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.027* (0.011) [0.005 , 0.050]	
High School Sophomore BB Varsity Athlete			0.003 (0.034) [-0.063 , 0.069]
High School Sophomore Non BB Varsity Athlete			0.029* (0.012) [0.006 , 0.052]
Single-Parent Household	-0.001 (0.012) [-0.025 , 0.023]	-0.000 (0.012) [-0.024 , 0.024]	0.000 (0.012) [-0.024 , 0.024]
Family Income (\$10K)	0.005* (0.002) [0.000 , 0.009]	0.004 (0.002) [-0.000 , 0.009]	0.004 (0.002) [-0.000 , 0.009]
Family Income Below Poverty Line	0.004 (0.015) [-0.025 , 0.033]	0.005 (0.015) [-0.023 , 0.034]	0.006 (0.015) [-0.023 , 0.034]
Number of Siblings	0.007 (0.003) [-0.000 , 0.014]	0.007 (0.003) [-0.000 , 0.013]	0.007 (0.003) [-0.000 , 0.013]
Father Education	0.013*** (0.003) [0.007 , 0.019]	0.013*** (0.003) [0.007 , 0.019]	0.013*** (0.003) [0.007 , 0.019]
Mother Education	0.007* (0.003) [0.001 , 0.013]	0.007* (0.003) [0.000 , 0.013]	0.006* (0.003) [0.000 , 0.013]
Urban Location	0.027 (0.014) [-0.001 , 0.056]	0.029* (0.014) [0.000 , 0.057]	0.028 (0.014) [-0.000 , 0.057]
Cognitive Ability (Z-Score)	0.072*** (0.007) [0.058 , 0.086]	0.071*** (0.007) [0.057 , 0.086]	0.071*** (0.007) [0.057 , 0.086]

## TABLE RBFO\_N2.8A: FBS College Attendance

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.010 (0.011) [-0.012 , 0.031]	0.009 (0.011) [-0.013 , 0.031]	0.009 (0.011) [-0.013 , 0.031]
Self Concept	0.030** (0.010) [0.010 , 0.049]	0.028** (0.010) [0.008 , 0.048]	0.028** (0.010) [0.008 , 0.048]
Non-Cognitive Ability (EXTERNAL)	0.038* (0.015) [0.009 , 0.066]	0.035* (0.015) [0.007 , 0.064]	0.035* (0.015) [0.006 , 0.064]
Black - not Hispanic	0.001 (0.019) [-0.036 , 0.039]	0.004 (0.019) [-0.034 , 0.041]	0.004 (0.019) [-0.033 , 0.042]
American Indian or Alaska Native	0.087 (0.067) [-0.043 , 0.218]	0.087 (0.067) [-0.044 , 0.217]	0.088 (0.067) [-0.043 , 0.218]
Asian or Pacific Islander	0.051 (0.033) [-0.013 , 0.115]	0.054 (0.033) [-0.010 , 0.118]	0.054 (0.033) [-0.010 , 0.118]
Hispanic or Latino	0.027 (0.017) [-0.006 , 0.060]	0.028 (0.017) [-0.004 , 0.061]	0.028 (0.017) [-0.004 , 0.061]
Constant	-0.330*** (0.068) [-0.463 , -0.196]	-0.323*** (0.068) [-0.457 , -0.190]	-0.322*** (0.068) [-0.455 , -0.189]
Observations	3,690	3,690	3,690
Adjusted R-squared	0.111	0.112	0.112

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N2.8B: FBS College Attendance**  
**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.033** (0.012) [0.010, 0.057]	0.027* (0.012) [0.003, 0.051]	0.035** (0.013) [0.009, 0.061]			
HS Sophomore Athlete × Black	-0.078* (0.035) [-0.147, -0.009]					
HS Sophomore Athlete × Income Below Poverty Line		0.006 (0.031) [-0.055, 0.066]				
HS Sophomore Athlete × Single-Parent Household			-0.032 (0.025) [-0.080, 0.017]			
High School Sophomore BB Varsity Athlete				0.002 (0.036) [-0.070, 0.073]	0.001 (0.038) [-0.073, 0.075]	0.028 (0.043) [-0.057, 0.114]
High School Sophomore Non BB Varsity Athlete				0.035** (0.012) [0.011, 0.059]	0.028* (0.012) [0.004, 0.053]	0.036** (0.014) [0.009, 0.062]
HS Sophomore BB Athlete × Black				0.006 (0.092) [-0.173, 0.185]		
HS Non BB Varsity Athlete × Black				-0.087* (0.036) [-0.158, -0.015]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.015 (0.077) [-0.136, 0.167]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.007 (0.033) [-0.058, 0.071]	
HS Sophomore BB Athlete × Single-Parent Household						-0.091 (0.061) [-0.210, 0.028]
HS Non BB Varsity Athlete × Single-Parent Household						-0.027 (0.026) [-0.077, 0.023]
Single-Parent Household	0.001 (0.012) [-0.023, 0.025]	-0.000 (0.012) [-0.024, 0.024]	0.014 (0.015) [-0.015, 0.043]	0.001 (0.012) [-0.023, 0.025]	0.000 (0.012) [-0.024, 0.024]	0.014 (0.015) [-0.015, 0.043]
Family Income (\$10K)	0.004 (0.002) [-0.000, 0.009]	0.004 (0.002) [-0.000, 0.009]	0.004 (0.002) [-0.000, 0.009]	0.004 (0.002) [-0.000, 0.009]	0.004 (0.002) [-0.000, 0.009]	0.004 (0.002) [-0.000, 0.009]
Family Income Below Poverty Line	0.006 (0.015) [-0.023, 0.034]	0.004 (0.015) [-0.026, 0.033]	0.005 (0.015) [-0.024, 0.034]	0.005 (0.015) [-0.024, 0.034]	0.003 (0.015) [-0.026, 0.033]	0.005 (0.015) [-0.024, 0.034]
Number of Siblings	0.006 (0.003) [-0.000, 0.013]	0.007 (0.003) [-0.000, 0.013]	0.007 (0.003) [-0.000, 0.013]	0.007 (0.003) [-0.000, 0.013]	0.007 (0.003) [-0.000, 0.013]	0.007 (0.003) [-0.000, 0.013]

**TABLE RBFO\_N2.8B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.013*** (0.003) [0.007, 0.019]	0.013*** (0.003) [0.007, 0.019]	0.013*** (0.003) [0.007, 0.019]	0.013*** (0.003) [0.007, 0.019]	0.013*** (0.003) [0.007, 0.019]	0.013*** (0.003) [0.007, 0.019]
Mother Education	0.006* (0.003) [0.000, 0.013]	0.007* (0.003) [0.000, 0.013]	0.006* (0.003) [0.000, 0.013]	0.006* (0.003) [0.000, 0.012]	0.006* (0.003) [0.000, 0.013]	0.007* (0.003) [0.000, 0.013]
Urban Location	0.029* (0.014) [0.000, 0.057]	0.029* (0.014) [0.000, 0.057]	0.028* (0.014) [0.000, 0.057]	0.028 (0.014) [-0.000, 0.057]	0.028 (0.014) [-0.000, 0.057]	0.028 (0.014) [-0.000, 0.057]
Cognitive Ability (Z-Score)	0.071*** (0.007) [0.057, 0.086]	0.071*** (0.007) [0.057, 0.086]	0.071*** (0.007) [0.057, 0.086]	0.071*** (0.007) [0.057, 0.086]	0.071*** (0.007) [0.057, 0.086]	0.071*** (0.007) [0.057, 0.086]
Locus of Control	0.008 (0.011) [-0.013, 0.030]	0.009 (0.011) [-0.013, 0.031]	0.009 (0.011) [-0.013, 0.031]	0.009 (0.011) [-0.013, 0.030]	0.009 (0.011) [-0.013, 0.031]	0.009 (0.011) [-0.013, 0.031]
Self Concept	0.028** (0.010) [0.008, 0.048]	0.028** (0.010) [0.008, 0.048]	0.028** (0.010) [0.008, 0.048]	0.028** (0.010) [0.008, 0.048]	0.028** (0.010) [0.008, 0.048]	0.028** (0.010) [0.008, 0.048]
Non-Cognitive Ability (EXTERNAL)	0.034* (0.015) [0.006, 0.063]	0.035* (0.015) [0.006, 0.064]	0.035* (0.015) [0.006, 0.064]	0.034* (0.015) [0.006, 0.063]	0.035* (0.015) [0.006, 0.064]	0.035* (0.015) [0.006, 0.063]
Black - not Hispanic	0.032 (0.024) [-0.015, 0.080]	0.004 (0.019) [-0.034, 0.041]	0.005 (0.019) [-0.033, 0.043]	0.033 (0.024) [-0.015, 0.080]	0.004 (0.019) [-0.034, 0.042]	0.006 (0.019) [-0.032, 0.044]
American Indian or Alaska Native	0.086 (0.067) [-0.045, 0.217]	0.087 (0.067) [-0.044, 0.218]	0.087 (0.066) [-0.043, 0.217]	0.088 (0.067) [-0.043, 0.218]	0.088 (0.067) [-0.043, 0.219]	0.091 (0.066) [-0.039, 0.221]
Asian or Pacific Islander	0.054 (0.033) [-0.010, 0.119]	0.054 (0.033) [-0.011, 0.118]	0.055 (0.033) [-0.009, 0.119]	0.054 (0.033) [-0.010, 0.119]	0.054 (0.033) [-0.011, 0.118]	0.055 (0.033) [-0.009, 0.119]
Hispanic or Latino	0.029 (0.017) [-0.004, 0.062]	0.028 (0.017) [-0.004, 0.061]	0.029 (0.017) [-0.003, 0.062]	0.029 (0.017) [-0.004, 0.062]	0.028 (0.017) [-0.004, 0.061]	0.029 (0.017) [-0.004, 0.062]
Constant	-0.322*** (0.068) [-0.455, -0.189]	-0.323*** (0.068) [-0.457, -0.190]	-0.326*** (0.068) [-0.459, -0.192]	-0.320*** (0.068) [-0.454, -0.187]	-0.322*** (0.068) [-0.455, -0.188]	-0.324*** (0.068) [-0.457, -0.191]
Observations	3,690	3,690	3,690	3,690	3,690	3,690
Adjusted R-squared	0.112	0.112	0.112	0.112	0.111	0.112



**TABLE RBFO\_N2.8B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 1994; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 1992**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.045 (0.033)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.032 (0.028)				
Incremental Effect of HS Athletics for Single-Parent Household			0.003 (0.021)			
Incremental Effect of HS BB Athletics for Blacks				0.008 (0.084)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.016 (0.068)	
Incremental Effect of HS BB Athletics for Single-Parent Household						-0.062 (0.043)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N3.1A: College Graduation (MARGINS)**  
**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
Single-Parent Household	0.041 (0.022) [-0.003, 0.085]	0.022 (0.014) [-0.005, 0.048]	-0.012 (0.014) [-0.040, 0.016]	0.019 (0.013) [-0.007, 0.045]	-0.063* (0.025) [-0.111, -0.014]	-0.007 (0.012) [-0.032, 0.017]
Family Income (\$10K)	-0.003 (0.003) [-0.010, 0.004]	-0.007* (0.003) [-0.012, -0.001]	-0.004 (0.003) [-0.010, 0.001]	-0.003 (0.002) [-0.007, 0.001]	0.017*** (0.003) [0.011, 0.023]	0.001 (0.001) [-0.002, 0.003]
Family Income Below Poverty Line	0.026 (0.039) [-0.050, 0.102]	-0.019 (0.017) [-0.052, 0.013]	-0.024 (0.018) [-0.060, 0.012]	0.017 (0.022) [-0.026, 0.059]	-0.007 (0.050) [-0.104, 0.090]	0.008 (0.031) [-0.053, 0.068]
Number of Siblings	0.009 (0.006) [-0.003, 0.021]	0.007 (0.004) [-0.000, 0.014]	0.000 (0.004) [-0.008, 0.008]	0.004 (0.003) [-0.002, 0.010]	-0.020** (0.007) [-0.034, -0.006]	0.001 (0.004) [-0.006, 0.008]
Father Education	-0.008* (0.004) [-0.016, -0.000]	-0.008** (0.003) [-0.014, -0.003]	-0.004 (0.003) [-0.010, 0.001]	-0.004 (0.002) [-0.009, 0.000]	0.020*** (0.004) [0.012, 0.028]	0.005** (0.002) [0.001, 0.009]
Mother Education	-0.007 (0.004) [-0.016, 0.001]	-0.002 (0.003) [-0.007, 0.004]	-0.006* (0.003) [-0.011, -0.001]	0.005* (0.002) [0.001, 0.010]	0.008 (0.004) [-0.001, 0.017]	0.002 (0.002) [-0.002, 0.006]
Urban Location	-0.007 (0.020) [-0.047, 0.032]	-0.004 (0.013) [-0.029, 0.020]	-0.024 (0.013) [-0.049, 0.001]	-0.008 (0.011) [-0.030, 0.014]	0.028 (0.023) [-0.017, 0.072]	0.016 (0.011) [-0.006, 0.038]
Cognitive Ability (Z-Score)	-0.067*** (0.010) [-0.086, -0.048]	-0.015* (0.006) [-0.027, -0.003]	-0.033*** (0.006) [-0.046, -0.021]	0.007 (0.005) [-0.004, 0.017]	0.076*** (0.011) [0.056, 0.097]	0.032*** (0.006) [0.020, 0.043]
Locus of Control	-0.016 (0.019) [-0.053, 0.021]	-0.009 (0.010) [-0.029, 0.011]	0.011 (0.012) [-0.013, 0.034]	-0.003 (0.011) [-0.023, 0.018]	0.011 (0.021) [-0.030, 0.052]	0.006 (0.011) [-0.016, 0.028]
Self Concept	-0.002 (0.017) [-0.035, 0.031]	0.009 (0.010) [-0.010, 0.029]	-0.001 (0.011) [-0.022, 0.019]	-0.003 (0.010) [-0.022, 0.016]	-0.017 (0.018) [-0.053, 0.019]	0.015 (0.010) [-0.005, 0.035]
Non-Cognitive Ability (EXTERNAL)	-0.101*** (0.026) [-0.153, -0.050]	-0.030* (0.015) [-0.059, -0.002]	-0.020 (0.017) [-0.053, 0.014]	-0.014 (0.015) [-0.043, 0.015]	0.163*** (0.034) [0.095, 0.230]	0.002 (0.020) [-0.036, 0.041]
Black - not Hispanic	-0.044 (0.035) [-0.112, 0.025]	0.043 (0.027) [-0.009, 0.095]	-0.022 (0.021) [-0.063, 0.019]	0.018 (0.024) [-0.029, 0.066]	0.037 (0.044) [-0.049, 0.123]	-0.033 (0.018) [-0.068, 0.002]
Asian or Pacific Islander	-0.011 (0.039) [-0.087, 0.066]	-0.030 (0.021) [-0.071, 0.011]	0.008 (0.025) [-0.041, 0.057]	-0.013 (0.019) [-0.051, 0.025]	0.020 (0.040) [-0.058, 0.099]	0.026 (0.020) [-0.014, 0.065]
Hispanic or Latino	0.023 (0.029) [-0.034, 0.079]	0.018 (0.018) [-0.018, 0.054]	-0.003 (0.017) [-0.037, 0.031]	0.024 (0.021) [-0.017, 0.064]	-0.046 (0.036) [-0.116, 0.023]	-0.015 (0.017) [-0.049, 0.019]
Observations	2400	2400	2400	2400	2400	2400

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

**TABLE RBFO\_N3.1B: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
High School Sophomore Varsity Athlete	-0.065*** (0.019) [-0.102, -0.029]	-0.021 (0.012) [-0.043, 0.002]	-0.012 (0.012) [-0.036, 0.012]	0.009 (0.010) [-0.011, 0.028]	0.086*** (0.020) [0.047, 0.125]	0.003 (0.010) [-0.016, 0.023]
Single-Parent Household	0.037 (0.022) [-0.007, 0.081]	0.020 (0.013) [-0.006, 0.046]	-0.013 (0.014) [-0.040, 0.015]	0.020 (0.013) [-0.006, 0.046]	-0.057* (0.025) [-0.106, -0.009]	-0.007 (0.012) [-0.031, 0.017]
Family Income (\$10K)	-0.003 (0.003) [-0.010, 0.004]	-0.007* (0.003) [-0.012, -0.001]	-0.004 (0.003) [-0.010, 0.001]	-0.003 (0.002) [-0.007, 0.001]	0.016*** (0.003) [0.010, 0.022]	0.001 (0.001) [-0.002, 0.003]
Family Income Below Poverty Line	0.025 (0.039) [-0.051, 0.102]	-0.019 (0.017) [-0.052, 0.014]	-0.024 (0.018) [-0.060, 0.012]	0.016 (0.022) [-0.026, 0.059]	-0.006 (0.050) [-0.104, 0.091]	0.008 (0.031) [-0.053, 0.068]
Number of Siblings	0.009 (0.006) [-0.003, 0.021]	0.007 (0.004) [-0.000, 0.014]	0.000 (0.004) [-0.008, 0.008]	0.004 (0.003) [-0.002, 0.010]	-0.020** (0.007) [-0.035, -0.006]	0.001 (0.004) [-0.006, 0.008]
Father Education	-0.008 (0.004) [-0.016, 0.000]	-0.008** (0.003) [-0.014, -0.003]	-0.004 (0.003) [-0.010, 0.001]	-0.004 (0.002) [-0.009, 0.000]	0.019*** (0.004) [0.011, 0.027]	0.005** (0.002) [0.001, 0.009]
Mother Education	-0.007 (0.004) [-0.015, 0.002]	-0.001 (0.003) [-0.007, 0.004]	-0.006* (0.003) [-0.011, -0.001]	0.005* (0.002) [0.001, 0.010]	0.007 (0.004) [-0.001, 0.016]	0.002 (0.002) [-0.002, 0.006]
Urban Location	-0.011 (0.020) [-0.050, 0.029]	-0.005 (0.013) [-0.030, 0.019]	-0.025* (0.012) [-0.049, -0.000]	-0.008 (0.011) [-0.030, 0.014]	0.032 (0.022) [-0.012, 0.076]	0.016 (0.011) [-0.006, 0.039]
Cognitive Ability (Z-Score)	-0.067*** (0.010) [-0.086, -0.048]	-0.015* (0.006) [-0.027, -0.003]	-0.033*** (0.006) [-0.046, -0.021]	0.007 (0.005) [-0.004, 0.017]	0.077*** (0.011) [0.057, 0.098]	0.032*** (0.006) [0.020, 0.043]
Locus of Control	-0.014 (0.019) [-0.051, 0.022]	-0.008 (0.010) [-0.029, 0.012]	0.011 (0.012) [-0.012, 0.035]	-0.003 (0.011) [-0.024, 0.018]	0.009 (0.021) [-0.032, 0.050]	0.006 (0.011) [-0.016, 0.028]
Self Concept	0.000 (0.017) [-0.033, 0.033]	0.010 (0.010) [-0.009, 0.029]	-0.001 (0.011) [-0.022, 0.020]	-0.004 (0.010) [-0.023, 0.015]	-0.020 (0.018) [-0.056, 0.016]	0.015 (0.010) [-0.005, 0.035]
Non-Cognitive Ability (EXTERNAL)	-0.101*** (0.026) [-0.152, -0.050]	-0.030* (0.014) [-0.058, -0.002]	-0.020 (0.017) [-0.054, 0.013]	-0.015 (0.015) [-0.044, 0.014]	0.164*** (0.035) [0.096, 0.232]	0.002 (0.020) [-0.037, 0.041]
Black - not Hispanic	-0.041 (0.035) [-0.108, 0.027]	0.045 (0.027) [-0.007, 0.097]	-0.022 (0.021) [-0.063, 0.020]	0.017 (0.024) [-0.030, 0.064]	0.034 (0.043) [-0.051, 0.118]	-0.033 (0.018) [-0.068, 0.002]
Asian or Pacific Islander	-0.018 (0.039) [-0.094, 0.057]	-0.032 (0.020) [-0.072, 0.008]	0.007 (0.025) [-0.042, 0.055]	-0.012 (0.020) [-0.050, 0.027]	0.029 (0.040) [-0.050, 0.107]	0.026 (0.020) [-0.013, 0.066]
Hispanic or Latino	0.026 (0.029) [-0.031, 0.082]	0.019 (0.019) [-0.018, 0.055]	-0.003 (0.017) [-0.037, 0.031]	0.024 (0.021) [-0.017, 0.064]	-0.050 (0.035) [-0.119, 0.019]	-0.015 (0.017) [-0.049, 0.019]
Observations	2400	2400	2400	2400	2400	2400

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

**TABLE RBFO\_N3.1C: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
High School Sophomore BB/FB Varsity Athlete	-0.045 (0.024) [-0.093, 0.002]	-0.019 (0.014) [-0.047, 0.009]	-0.009 (0.016) [-0.041, 0.022]	0.024 (0.018) [-0.011, 0.059]	0.047 (0.031) [-0.014, 0.109]	0.002 (0.017) [-0.031, 0.036]
High School Sophomore Non BB/FB Varsity Athlete	-0.069*** (0.019) [-0.106, -0.032]	-0.020 (0.012) [-0.043, 0.003]	-0.013 (0.013) [-0.038, 0.012]	0.004 (0.011) [-0.018, 0.026]	0.095*** (0.021) [0.053, 0.136]	0.004 (0.011) [-0.017, 0.024]
Single-Parent Household	0.037 (0.022) [-0.007, 0.081]	0.020 (0.013) [-0.006, 0.047]	-0.013 (0.014) [-0.040, 0.015]	0.020 (0.013) [-0.006, 0.046]	-0.057* (0.025) [-0.106, -0.009]	-0.007 (0.012) [-0.031, 0.017]
Family Income (\$10K)	-0.003 (0.003) [-0.010, 0.004]	-0.007* (0.003) [-0.012, -0.001]	-0.004 (0.003) [-0.010, 0.001]	-0.003 (0.002) [-0.007, 0.001]	0.016*** (0.003) [0.010, 0.022]	0.001 (0.001) [-0.002, 0.003]
Family Income Below Poverty Line	0.025 (0.039) [-0.052, 0.101]	-0.019 (0.017) [-0.052, 0.014]	-0.024 (0.018) [-0.060, 0.012]	0.016 (0.022) [-0.027, 0.058]	-0.005 (0.049) [-0.102, 0.092]	0.007 (0.031) [-0.053, 0.068]
Number of Siblings	0.009 (0.006) [-0.003, 0.021]	0.007 (0.004) [-0.000, 0.014]	0.000 (0.004) [-0.008, 0.008]	0.004 (0.003) [-0.002, 0.010]	-0.021** (0.007) [-0.035, -0.007]	0.001 (0.004) [-0.006, 0.008]
Father Education	-0.008 (0.004) [-0.015, 0.000]	-0.008** (0.003) [-0.014, -0.003]	-0.004 (0.003) [-0.010, 0.001]	-0.004 (0.002) [-0.009, 0.000]	0.019*** (0.004) [0.011, 0.027]	0.005** (0.002) [0.001, 0.009]
Mother Education	-0.007 (0.004) [-0.015, 0.002]	-0.001 (0.003) [-0.007, 0.004]	-0.006* (0.003) [-0.011, -0.001]	0.005* (0.002) [0.001, 0.010]	0.007 (0.004) [-0.001, 0.016]	0.002 (0.002) [-0.002, 0.006]
Urban Location	-0.011 (0.020) [-0.050, 0.029]	-0.005 (0.013) [-0.030, 0.019]	-0.025* (0.012) [-0.049, -0.000]	-0.007 (0.011) [-0.030, 0.015]	0.032 (0.022) [-0.012, 0.076]	0.016 (0.011) [-0.006, 0.038]
Cognitive Ability (Z-Score)	-0.067*** (0.010) [-0.086, -0.048]	-0.015* (0.006) [-0.028, -0.003]	-0.033*** (0.006) [-0.046, -0.021]	0.007 (0.005) [-0.003, 0.018]	0.076*** (0.011) [0.056, 0.097]	0.032*** (0.006) [0.020, 0.043]
Locus of Control	-0.014 (0.019) [-0.051, 0.022]	-0.008 (0.010) [-0.029, 0.012]	0.011 (0.012) [-0.012, 0.035]	-0.003 (0.011) [-0.024, 0.018]	0.008 (0.021) [-0.032, 0.049]	0.006 (0.011) [-0.016, 0.028]
Self Concept	0.000 (0.017) [-0.033, 0.033]	0.010 (0.010) [-0.009, 0.029]	-0.001 (0.011) [-0.022, 0.020]	-0.004 (0.010) [-0.023, 0.015]	-0.020 (0.018) [-0.056, 0.015]	0.015 (0.010) [-0.005, 0.035]
Non-Cognitive Ability (EXTERNAL)	-0.100*** (0.026) [-0.151, -0.048]	-0.030* (0.014) [-0.058, -0.002]	-0.020 (0.017) [-0.053, 0.013]	-0.014 (0.015) [-0.042, 0.015]	0.161*** (0.035) [0.093, 0.229]	0.002 (0.020) [-0.037, 0.041]
Black - not Hispanic	-0.042 (0.034) [-0.110, 0.025]	0.045 (0.027) [-0.008, 0.098]	-0.022 (0.021) [-0.064, 0.020]	0.015 (0.023) [-0.031, 0.060]	0.038 (0.043) [-0.047, 0.123]	-0.033 (0.018) [-0.068, 0.002]
Asian or Pacific Islander	-0.018 (0.039) [-0.093, 0.058]	-0.032 (0.020) [-0.072, 0.008]	0.007 (0.025) [-0.042, 0.055]	-0.011 (0.020) [-0.050, 0.028]	0.027 (0.040) [-0.051, 0.106]	0.026 (0.020) [-0.013, 0.066]
Hispanic or Latino	0.026 (0.029) [-0.031, 0.083]	0.019 (0.019) [-0.018, 0.055]	-0.002 (0.017) [-0.036, 0.032]	0.025 (0.021) [-0.016, 0.066]	-0.052 (0.035) [-0.121, 0.017]	-0.015 (0.017) [-0.049, 0.018]
Observations	2400	2400	2400	2400	2400	2400

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

**TABLE RBFO\_N3.1D: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
College Varsity Athlete	-0.123*** (0.024) [-0.170, -0.076]	-0.009 (0.017) [-0.042, 0.025]	-0.043** (0.015) [-0.073, -0.014]	0.010 (0.016) [-0.022, 0.042]	0.155*** (0.029) [0.098, 0.213]	0.010 (0.015) [-0.019, 0.039]
Single-Parent Household	0.041 (0.022) [-0.003, 0.085]	0.022 (0.014) [-0.005, 0.048]	-0.012 (0.014) [-0.040, 0.015]	0.019 (0.013) [-0.007, 0.045]	-0.062* (0.025) [-0.110, -0.014]	-0.007 (0.012) [-0.032, 0.017]
Family Income (\$10K)	-0.003 (0.004) [-0.010, 0.004]	-0.007* (0.003) [-0.012, -0.001]	-0.004 (0.003) [-0.010, 0.001]	-0.003 (0.002) [-0.007, 0.001]	0.017*** (0.003) [0.011, 0.023]	0.001 (0.001) [-0.002, 0.003]
Family Income Below Poverty Line	0.018 (0.038) [-0.057, 0.092]	-0.019 (0.017) [-0.052, 0.013]	-0.026 (0.018) [-0.061, 0.010]	0.017 (0.022) [-0.025, 0.060]	0.002 (0.049) [-0.095, 0.099]	0.008 (0.031) [-0.053, 0.069]
Number of Siblings	0.009 (0.006) [-0.003, 0.021]	0.007 (0.004) [-0.000, 0.014]	0.000 (0.004) [-0.007, 0.008]	0.004 (0.003) [-0.002, 0.010]	-0.021** (0.007) [-0.035, -0.007]	0.001 (0.004) [-0.006, 0.008]
Father Education	-0.007 (0.004) [-0.015, 0.000]	-0.008** (0.003) [-0.014, -0.003]	-0.004 (0.003) [-0.009, 0.001]	-0.004 (0.002) [-0.009, 0.000]	0.019*** (0.004) [0.011, 0.027]	0.005* (0.002) [0.001, 0.009]
Mother Education	-0.007 (0.004) [-0.015, 0.002]	-0.002 (0.003) [-0.007, 0.004]	-0.006* (0.003) [-0.011, -0.001]	0.005* (0.002) [0.001, 0.010]	0.007 (0.004) [-0.002, 0.016]	0.002 (0.002) [-0.002, 0.006]
Urban Location	-0.008 (0.020) [-0.047, 0.031]	-0.004 (0.013) [-0.029, 0.020]	-0.024 (0.013) [-0.049, 0.000]	-0.008 (0.011) [-0.030, 0.014]	0.029 (0.022) [-0.015, 0.073]	0.016 (0.011) [-0.006, 0.038]
Cognitive Ability (Z-Score)	-0.066*** (0.010) [-0.085, -0.047]	-0.015* (0.006) [-0.028, -0.003]	-0.033*** (0.006) [-0.045, -0.020]	0.007 (0.005) [-0.004, 0.017]	0.076*** (0.011) [0.056, 0.097]	0.032*** (0.006) [0.020, 0.043]
Locus of Control	-0.014 (0.019) [-0.050, 0.023]	-0.009 (0.010) [-0.029, 0.012]	0.012 (0.012) [-0.012, 0.035]	-0.003 (0.010) [-0.023, 0.018]	0.007 (0.021) [-0.033, 0.048]	0.006 (0.011) [-0.016, 0.028]
Self Concept	0.001 (0.017) [-0.032, 0.033]	0.010 (0.010) [-0.010, 0.029]	-0.000 (0.011) [-0.021, 0.020]	-0.004 (0.010) [-0.022, 0.015]	-0.021 (0.018) [-0.057, 0.014]	0.015 (0.010) [-0.005, 0.035]
Non-Cognitive Ability (EXTERNAL)	-0.097*** (0.026) [-0.148, -0.046]	-0.030* (0.015) [-0.058, -0.001]	-0.019 (0.017) [-0.052, 0.015]	-0.014 (0.015) [-0.043, 0.014]	0.158*** (0.034) [0.091, 0.226]	0.002 (0.020) [-0.037, 0.040]
Black - not Hispanic	-0.034 (0.035) [-0.103, 0.036]	0.044 (0.027) [-0.009, 0.096]	-0.019 (0.022) [-0.061, 0.024]	0.017 (0.024) [-0.029, 0.064]	0.025 (0.043) [-0.060, 0.110]	-0.033 (0.018) [-0.068, 0.002]
Asian or Pacific Islander	-0.018 (0.038) [-0.093, 0.057]	-0.031 (0.021) [-0.071, 0.010]	0.005 (0.024) [-0.043, 0.053]	-0.013 (0.019) [-0.051, 0.025]	0.029 (0.040) [-0.049, 0.108]	0.026 (0.020) [-0.014, 0.066]
Hispanic or Latino	0.020 (0.029) [-0.037, 0.076]	0.017 (0.018) [-0.018, 0.053]	-0.004 (0.017) [-0.038, 0.029]	0.024 (0.021) [-0.017, 0.065]	-0.042 (0.036) [-0.112, 0.028]	-0.015 (0.017) [-0.049, 0.019]
Observations	2400	2400	2400	2400	2400	2400

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

**TABLE RBFO\_N3.1E: College Graduation (MARGINS)  
Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 1994

	(1) One Year or Less	(2) Two or Less Years	(3) Associate's Degree	(4) More Than Two Years	(5) Bachelor's Degree	(6) Graduate Degree
College Varsity and High School BB/FB Varsity Athlete	-0.060 (0.063) [-0.184, 0.063]	-0.055* (0.026) [-0.105, -0.004]	-0.033 (0.038) [-0.107, 0.041]	-0.033 (0.027) [-0.087, 0.021]	0.139 (0.079) [-0.016, 0.294]	0.042 (0.051) [-0.058, 0.142]
College Varsity Athlete Non BB/FB	-0.133*** (0.025) [-0.182, -0.084]	-0.000 (0.019) [-0.037, 0.037]	-0.045** (0.016) [-0.076, -0.014]	0.016 (0.018) [-0.019, 0.051]	0.156*** (0.031) [0.095, 0.216]	0.006 (0.015) [-0.024, 0.036]
Single-Parent Household	0.041 (0.022) [-0.003, 0.085]	0.021 (0.014) [-0.005, 0.048]	-0.012 (0.014) [-0.040, 0.015]	0.019 (0.013) [-0.007, 0.045]	-0.062* (0.025) [-0.110, -0.014]	-0.007 (0.012) [-0.032, 0.017]
Family Income (\$10K)	-0.003 (0.004) [-0.010, 0.004]	-0.007* (0.003) [-0.013, -0.001]	-0.004 (0.003) [-0.010, 0.001]	-0.003 (0.002) [-0.007, 0.001]	0.017*** (0.003) [0.011, 0.023]	0.001 (0.001) [-0.002, 0.003]
Family Income Below Poverty Line	0.019 (0.038) [-0.056, 0.094]	-0.020 (0.016) [-0.053, 0.012]	-0.026 (0.018) [-0.061, 0.010]	0.016 (0.022) [-0.026, 0.059]	0.002 (0.050) [-0.095, 0.100]	0.008 (0.031) [-0.053, 0.069]
Number of Siblings	0.009 (0.006) [-0.003, 0.021]	0.007 (0.004) [-0.000, 0.014]	0.000 (0.004) [-0.007, 0.008]	0.004 (0.003) [-0.002, 0.010]	-0.021** (0.007) [-0.035, -0.007]	0.001 (0.004) [-0.006, 0.008]
Father Education	-0.008 (0.004) [-0.015, 0.000]	-0.008** (0.003) [-0.014, -0.003]	-0.004 (0.003) [-0.009, 0.001]	-0.004 (0.002) [-0.009, 0.000]	0.019*** (0.004) [0.011, 0.027]	0.005* (0.002) [0.001, 0.009]
Mother Education	-0.006 (0.004) [-0.015, 0.002]	-0.002 (0.003) [-0.008, 0.004]	-0.006* (0.003) [-0.011, -0.000]	0.005* (0.002) [0.000, 0.010]	0.007 (0.004) [-0.002, 0.016]	0.002 (0.002) [-0.002, 0.006]
Urban Location	-0.008 (0.020) [-0.047, 0.031]	-0.004 (0.013) [-0.029, 0.020]	-0.024 (0.013) [-0.049, 0.001]	-0.008 (0.011) [-0.030, 0.014]	0.029 (0.022) [-0.015, 0.073]	0.016 (0.011) [-0.006, 0.038]
Cognitive Ability (Z-Score)	-0.066*** (0.010) [-0.085, -0.047]	-0.015* (0.006) [-0.028, -0.003]	-0.033*** (0.006) [-0.045, -0.020]	0.006 (0.005) [-0.004, 0.017]	0.076*** (0.011) [0.055, 0.097]	0.032*** (0.006) [0.021, 0.043]
Locus of Control	-0.014 (0.019) [-0.051, 0.023]	-0.008 (0.010) [-0.028, 0.012]	0.012 (0.012) [-0.012, 0.035]	-0.002 (0.010) [-0.023, 0.018]	0.007 (0.021) [-0.033, 0.048]	0.006 (0.011) [-0.016, 0.027]
Self Concept	0.001 (0.017) [-0.032, 0.034]	0.009 (0.010) [-0.010, 0.029]	-0.000 (0.011) [-0.021, 0.020]	-0.004 (0.010) [-0.023, 0.015]	-0.021 (0.018) [-0.057, 0.014]	0.015 (0.010) [-0.005, 0.035]
Non-Cognitive Ability (EXTERNAL)	-0.097*** (0.026) [-0.148, -0.046]	-0.030* (0.015) [-0.058, -0.001]	-0.019 (0.017) [-0.052, 0.015]	-0.014 (0.015) [-0.043, 0.014]	0.158*** (0.034) [0.091, 0.226]	0.002 (0.020) [-0.037, 0.041]
Black - not Hispanic	-0.036 (0.035) [-0.104, 0.033]	0.046 (0.027) [-0.007, 0.100]	-0.019 (0.022) [-0.062, 0.024]	0.018 (0.024) [-0.029, 0.065]	0.024 (0.043) [-0.061, 0.109]	-0.033 (0.018) [-0.068, 0.002]
Asian or Pacific Islander	-0.018 (0.038) [-0.093, 0.057]	-0.031 (0.021) [-0.071, 0.010]	0.005 (0.024) [-0.043, 0.053]	-0.013 (0.019) [-0.050, 0.025]	0.030 (0.040) [-0.048, 0.108]	0.026 (0.020) [-0.014, 0.066]
Hispanic or Latino	0.020 (0.029) [-0.036, 0.077]	0.017 (0.018) [-0.019, 0.053]	-0.004 (0.017) [-0.038, 0.029]	0.023 (0.021) [-0.017, 0.064]	-0.042 (0.036) [-0.112, 0.028]	-0.014 (0.018) [-0.049, 0.020]
Observations	2400	2400	2400	2400	2400	2400

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

**TABLE RBFO\_N3.2A: College Graduation (MARGINS)**  
**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
Single-Parent Household	0.060** (0.019) [0.023, 0.096]	0.027* (0.012) [0.003, 0.051]	-0.014 (0.012) [-0.037, 0.010]	0.005 (0.011) [-0.017, 0.026]	-0.062** (0.021) [-0.105, -0.020]	-0.015 (0.012) [-0.039, 0.009]
Family Income (\$10K)	-0.006 (0.003) [-0.013, 0.000]	-0.004 (0.002) [-0.008, 0.001]	-0.007* (0.003) [-0.012, -0.001]	0.001 (0.001) [-0.001, 0.004]	0.014*** (0.003) [0.008, 0.020]	0.001 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.025 (0.025) [-0.075, 0.024]	0.005 (0.016) [-0.026, 0.036]	-0.003 (0.019) [-0.039, 0.034]	0.001 (0.016) [-0.030, 0.033]	-0.001 (0.041) [-0.081, 0.078]	0.023 (0.031) [-0.038, 0.084]
Number of Siblings	0.010 (0.005) [-0.000, 0.020]	-0.001 (0.003) [-0.007, 0.005]	-0.007 (0.004) [-0.014, 0.001]	0.007* (0.003) [0.001, 0.013]	-0.006 (0.006) [-0.018, 0.006]	-0.004 (0.003) [-0.010, 0.003]
Father Education	-0.019*** (0.004) [-0.027, -0.011]	-0.000 (0.002) [-0.005, 0.004]	-0.006* (0.003) [-0.011, -0.000]	0.000 (0.002) [-0.004, 0.004]	0.019*** (0.004) [0.011, 0.027]	0.006** (0.002) [0.001, 0.010]
Mother Education	-0.007 (0.004) [-0.016, 0.001]	-0.005 (0.003) [-0.010, 0.000]	-0.000 (0.003) [-0.006, 0.005]	-0.002 (0.002) [-0.007, 0.003]	0.011* (0.004) [0.003, 0.020]	0.003 (0.002) [-0.001, 0.008]
Urban Location	0.001 (0.019) [-0.036, 0.038]	0.012 (0.012) [-0.012, 0.037]	-0.012 (0.013) [-0.037, 0.013]	-0.005 (0.010) [-0.024, 0.015]	0.004 (0.020) [-0.036, 0.043]	-0.000 (0.011) [-0.021, 0.021]
Cognitive Ability (Z-Score)	-0.088*** (0.010) [-0.106, -0.069]	-0.019** (0.006) [-0.031, -0.008]	-0.033*** (0.007) [-0.045, -0.020]	-0.000 (0.005) [-0.011, 0.010]	0.100*** (0.010) [0.080, 0.120]	0.040*** (0.006) [0.028, 0.052]
Locus of Control	-0.051** (0.016) [-0.081, -0.020]	-0.017 (0.009) [-0.035, 0.002]	0.023* (0.011) [0.002, 0.045]	0.002 (0.009) [-0.016, 0.019]	0.038 (0.020) [-0.000, 0.076]	0.004 (0.011) [-0.017, 0.026]
Self Concept	0.001 (0.014) [-0.027, 0.028]	0.008 (0.009) [-0.010, 0.026]	-0.017 (0.009) [-0.034, 0.001]	-0.004 (0.009) [-0.021, 0.013]	0.017 (0.017) [-0.015, 0.050]	-0.005 (0.009) [-0.023, 0.013]
Non-Cognitive Ability (EXTERNAL)	-0.172*** (0.029) [-0.228, -0.116]	-0.041** (0.016) [-0.072, -0.011]	-0.010 (0.021) [-0.051, 0.031]	-0.020 (0.018) [-0.055, 0.016]	0.154*** (0.044) [0.068, 0.241]	0.088** (0.031) [0.027, 0.150]
Black - not Hispanic	-0.033 (0.025) [-0.083, 0.017]	-0.034** (0.011) [-0.055, -0.013]	-0.011 (0.019) [-0.047, 0.026]	0.042 (0.023) [-0.004, 0.087]	0.007 (0.037) [-0.066, 0.080]	0.029 (0.027) [-0.023, 0.081]
Asian or Pacific Islander	0.001 (0.037) [-0.072, 0.074]	-0.036* (0.016) [-0.066, -0.005]	-0.049* (0.019) [-0.087, -0.011]	0.003 (0.022) [-0.040, 0.046]	0.050 (0.038) [-0.025, 0.125]	0.031 (0.019) [-0.007, 0.068]
Hispanic or Latino	-0.009 (0.023) [-0.054, 0.036]	-0.007 (0.013) [-0.032, 0.018]	-0.001 (0.016) [-0.034, 0.031]	0.021 (0.016) [-0.011, 0.052]	-0.017 (0.031) [-0.078, 0.045]	0.014 (0.023) [-0.031, 0.059]
Observations	2860	2860	2860	2860	2860	2860

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

**TABLE RBFO\_N3.2B: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
High School Sophomore Varsity Athlete	-0.064*** (0.016) [-0.095, -0.034]	-0.005 (0.009) [-0.023, 0.014]	0.006 (0.011) [-0.016, 0.027]	-0.018* (0.009) [-0.036, -0.001]	0.075*** (0.018) [0.041, 0.110]	0.006 (0.010) [-0.013, 0.025]
Single-Parent Household	0.057** (0.019) [0.021, 0.094]	0.026* (0.012) [0.002, 0.050]	-0.014 (0.012) [-0.037, 0.010]	0.004 (0.011) [-0.017, 0.025]	-0.059** (0.021) [-0.101, -0.017]	-0.015 (0.012) [-0.039, 0.009]
Family Income (\$10K)	-0.006 (0.003) [-0.012, 0.001]	-0.004 (0.002) [-0.008, 0.001]	-0.007* (0.003) [-0.012, -0.001]	0.002 (0.001) [-0.001, 0.004]	0.013*** (0.003) [0.008, 0.019]	0.001 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.028 (0.025) [-0.077, 0.021]	0.004 (0.016) [-0.026, 0.035]	-0.002 (0.019) [-0.039, 0.034]	0.001 (0.016) [-0.030, 0.031]	0.003 (0.040) [-0.076, 0.081]	0.023 (0.031) [-0.038, 0.084]
Number of Siblings	0.010* (0.005) [0.000, 0.020]	-0.001 (0.003) [-0.007, 0.005]	-0.006 (0.004) [-0.014, 0.001]	0.007* (0.003) [0.001, 0.013]	-0.007 (0.006) [-0.019, 0.005]	-0.004 (0.003) [-0.010, 0.003]
Father Education	-0.018*** (0.004) [-0.026, -0.011]	-0.000 (0.002) [-0.005, 0.004]	-0.006* (0.003) [-0.011, -0.000]	0.000 (0.002) [-0.004, 0.004]	0.019*** (0.004) [0.011, 0.027]	0.006** (0.002) [0.001, 0.010]
Mother Education	-0.006 (0.004) [-0.014, 0.002]	-0.005 (0.003) [-0.010, 0.001]	-0.000 (0.003) [-0.006, 0.005]	-0.002 (0.002) [-0.007, 0.003]	0.009* (0.004) [0.001, 0.018]	0.003 (0.002) [-0.002, 0.008]
Urban Location	-0.003 (0.019) [-0.039, 0.034]	0.012 (0.012) [-0.012, 0.036]	-0.012 (0.013) [-0.037, 0.013]	-0.006 (0.010) [-0.025, 0.014]	0.008 (0.020) [-0.032, 0.048]	0.000 (0.011) [-0.021, 0.021]
Cognitive Ability (Z-Score)	-0.087*** (0.009) [-0.105, -0.068]	-0.019** (0.006) [-0.031, -0.008]	-0.033*** (0.007) [-0.046, -0.020]	-0.000 (0.005) [-0.011, 0.010]	0.099*** (0.010) [0.079, 0.119]	0.040*** (0.006) [0.028, 0.052]
Locus of Control	-0.049** (0.016) [-0.080, -0.019]	-0.017 (0.009) [-0.035, 0.002]	0.023* (0.011) [0.002, 0.045]	0.002 (0.009) [-0.015, 0.020]	0.036 (0.020) [-0.002, 0.074]	0.004 (0.011) [-0.018, 0.026]
Self Concept	0.005 (0.014) [-0.023, 0.032]	0.009 (0.009) [-0.009, 0.026]	-0.017 (0.009) [-0.035, 0.001]	-0.003 (0.009) [-0.020, 0.014]	0.013 (0.017) [-0.020, 0.045]	-0.006 (0.009) [-0.024, 0.012]
Non-Cognitive Ability (EXTERNAL)	-0.166*** (0.028) [-0.222, -0.111]	-0.041** (0.016) [-0.071, -0.010]	-0.009 (0.021) [-0.050, 0.032]	-0.018 (0.018) [-0.053, 0.017]	0.147*** (0.044) [0.061, 0.233]	0.087** (0.031) [0.026, 0.149]
Black - not Hispanic	-0.042 (0.025) [-0.090, 0.007]	-0.035** (0.011) [-0.056, -0.014]	-0.011 (0.019) [-0.047, 0.026]	0.036 (0.022) [-0.007, 0.079]	0.020 (0.038) [-0.053, 0.094]	0.031 (0.027) [-0.023, 0.084]
Asian or Pacific Islander	-0.006 (0.036) [-0.078, 0.065]	-0.036* (0.015) [-0.066, -0.006]	-0.049* (0.019) [-0.087, -0.011]	-0.000 (0.021) [-0.042, 0.042]	0.060 (0.038) [-0.015, 0.134]	0.032 (0.019) [-0.006, 0.070]
Hispanic or Latino	-0.014 (0.023) [-0.059, 0.030]	-0.008 (0.013) [-0.032, 0.017]	-0.002 (0.016) [-0.034, 0.031]	0.018 (0.016) [-0.013, 0.049]	-0.010 (0.031) [-0.071, 0.052]	0.015 (0.023) [-0.030, 0.060]
Observations	2860	2860	2860	2860	2860	2860

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.



**TABLE RBFO\_N3.2C: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
 Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
High School Sophomore BB Varsity Athlete	-0.008 (0.044) [-0.094, 0.079]	-0.028 (0.021) [-0.069, 0.012]	0.047 (0.037) [-0.025, 0.119]	-0.017 (0.021) [-0.059, 0.025]	0.059 (0.054) [-0.047, 0.165]	-0.053** (0.019) [-0.091, -0.015]
High School Sophomore Non BB Varsity Athlete	-0.068*** (0.016) [-0.099, -0.037]	-0.003 (0.009) [-0.021, 0.016]	0.003 (0.011) [-0.019, 0.025]	-0.018* (0.009) [-0.036, -0.000]	0.078*** (0.018) [0.043, 0.113]	0.008 (0.010) [-0.011, 0.027]
Single-Parent Household	0.057** (0.019) [0.021, 0.093]	0.026* (0.012) [0.003, 0.050]	-0.014 (0.012) [-0.037, 0.010]	0.004 (0.011) [-0.017, 0.025]	-0.059** (0.021) [-0.101, -0.017]	-0.015 (0.012) [-0.039, 0.009]
Family Income (\$10K)	-0.006 (0.003) [-0.012, 0.001]	-0.004 (0.002) [-0.008, 0.001]	-0.007* (0.003) [-0.012, -0.001]	0.002 (0.001) [-0.001, 0.004]	0.013*** (0.003) [0.007, 0.019]	0.001 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.028 (0.025) [-0.077, 0.020]	0.004 (0.016) [-0.026, 0.035]	-0.002 (0.019) [-0.039, 0.034]	0.001 (0.016) [-0.030, 0.031]	0.002 (0.040) [-0.077, 0.081]	0.024 (0.031) [-0.037, 0.085]
Number of Siblings	0.010* (0.005) [0.000, 0.020]	-0.001 (0.003) [-0.007, 0.005]	-0.006 (0.004) [-0.014, 0.001]	0.007* (0.003) [0.001, 0.013]	-0.007 (0.006) [-0.019, 0.005]	-0.004 (0.003) [-0.010, 0.003]
Father Education	-0.018*** (0.004) [-0.026, -0.011]	-0.000 (0.002) [-0.005, 0.004]	-0.006* (0.003) [-0.011, -0.000]	0.000 (0.002) [-0.004, 0.004]	0.019*** (0.004) [0.011, 0.027]	0.006** (0.002) [0.001, 0.010]
Mother Education	-0.006 (0.004) [-0.014, 0.003]	-0.005 (0.003) [-0.010, 0.001]	-0.000 (0.003) [-0.006, 0.005]	-0.002 (0.002) [-0.007, 0.003]	0.009* (0.004) [0.001, 0.018]	0.003 (0.002) [-0.002, 0.008]
Urban Location	-0.002 (0.019) [-0.038, 0.035]	0.012 (0.012) [-0.012, 0.036]	-0.011 (0.013) [-0.036, 0.014]	-0.006 (0.010) [-0.025, 0.014]	0.008 (0.020) [-0.032, 0.047]	-0.001 (0.011) [-0.022, 0.020]
Cognitive Ability (Z-Score)	-0.086*** (0.009) [-0.105, -0.068]	-0.019** (0.006) [-0.031, -0.008]	-0.033*** (0.007) [-0.046, -0.020]	-0.000 (0.005) [-0.011, 0.010]	0.099*** (0.010) [0.079, 0.119]	0.040*** (0.006) [0.028, 0.052]
Locus of Control	-0.049** (0.016) [-0.079, -0.018]	-0.017 (0.009) [-0.035, 0.002]	0.023* (0.011) [0.002, 0.045]	0.002 (0.009) [-0.015, 0.020]	0.036 (0.020) [-0.002, 0.074]	0.004 (0.011) [-0.017, 0.026]
Self Concept	0.005 (0.014) [-0.023, 0.033]	0.009 (0.009) [-0.009, 0.026]	-0.017 (0.009) [-0.035, 0.001]	-0.003 (0.009) [-0.020, 0.014]	0.013 (0.017) [-0.020, 0.045]	-0.006 (0.009) [-0.024, 0.012]
Non-Cognitive Ability (EXTERNAL)	-0.166*** (0.028) [-0.221, -0.110]	-0.041** (0.016) [-0.072, -0.011]	-0.008 (0.021) [-0.049, 0.033]	-0.018 (0.018) [-0.053, 0.017]	0.146*** (0.044) [0.060, 0.233]	0.087** (0.031) [0.025, 0.148]
Black - not Hispanic	-0.043 (0.025) [-0.092, 0.005]	-0.034** (0.011) [-0.056, -0.013]	-0.012 (0.019) [-0.049, 0.025]	0.036 (0.022) [-0.007, 0.079]	0.021 (0.038) [-0.053, 0.095]	0.033 (0.028) [-0.022, 0.087]
Asian or Pacific Islander	-0.007 (0.036) [-0.078, 0.064]	-0.036* (0.015) [-0.066, -0.006]	-0.049* (0.019) [-0.087, -0.011]	-0.000 (0.021) [-0.042, 0.042]	0.060 (0.038) [-0.014, 0.135]	0.032 (0.019) [-0.006, 0.070]
Hispanic or Latino	-0.015 (0.023) [-0.059, 0.030]	-0.008 (0.013) [-0.032, 0.017]	-0.002 (0.016) [-0.034, 0.030]	0.018 (0.016) [-0.013, 0.049]	-0.009 (0.031) [-0.071, 0.052]	0.016 (0.023) [-0.030, 0.061]
Observations	2860	2860	2860	2860	2860	2860

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

**TABLE RBFO\_N3.2D: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
College Varsity Athlete	-0.108*** (0.033) [-0.172, -0.044]	-0.057*** (0.010) [-0.077, -0.037]	-0.076*** (0.013) [-0.102, -0.049]	0.001 (0.021) [-0.040, 0.042]	0.223*** (0.039) [0.146, 0.300]	0.016 (0.019) [-0.021, 0.054]
Single-Parent Household	0.057** (0.019) [0.021, 0.094]	0.026* (0.012) [0.002, 0.049]	-0.015 (0.012) [-0.038, 0.009]	0.004 (0.011) [-0.017, 0.025]	-0.058** (0.021) [-0.100, -0.017]	-0.014 (0.012) [-0.038, 0.010]
Family Income (\$10K)	-0.006 (0.003) [-0.013, -0.000]	-0.003 (0.002) [-0.008, 0.001]	-0.006* (0.003) [-0.012, -0.001]	0.001 (0.001) [-0.001, 0.004]	0.013*** (0.003) [0.008, 0.019]	0.001 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.023 (0.025) [-0.072, 0.026]	0.006 (0.016) [-0.025, 0.037]	-0.002 (0.019) [-0.038, 0.035]	0.001 (0.016) [-0.030, 0.032]	-0.005 (0.040) [-0.083, 0.073]	0.023 (0.031) [-0.038, 0.083]
Number of Siblings	0.010 (0.005) [-0.000, 0.020]	-0.001 (0.003) [-0.007, 0.005]	-0.006 (0.004) [-0.014, 0.001]	0.007* (0.003) [0.001, 0.013]	-0.006 (0.006) [-0.018, 0.006]	-0.004 (0.003) [-0.010, 0.003]
Father Education	-0.018*** (0.004) [-0.026, -0.011]	0.000 (0.002) [-0.005, 0.005]	-0.005 (0.003) [-0.011, 0.000]	0.000 (0.002) [-0.004, 0.004]	0.018*** (0.004) [0.010, 0.026]	0.006** (0.002) [0.001, 0.010]
Mother Education	-0.007 (0.004) [-0.015, 0.002]	-0.004 (0.003) [-0.010, 0.001]	0.000 (0.003) [-0.005, 0.006]	-0.002 (0.002) [-0.007, 0.003]	0.010* (0.004) [0.001, 0.018]	0.003 (0.002) [-0.002, 0.008]
Urban Location	-0.000 (0.019) [-0.037, 0.036]	0.012 (0.012) [-0.012, 0.036]	-0.013 (0.013) [-0.038, 0.012]	-0.005 (0.010) [-0.024, 0.015]	0.006 (0.020) [-0.033, 0.045]	-0.000 (0.011) [-0.021, 0.021]
Cognitive Ability (Z-Score)	-0.087*** (0.010) [-0.106, -0.068]	-0.019** (0.006) [-0.031, -0.007]	-0.032*** (0.007) [-0.045, -0.019]	0.000 (0.005) [-0.011, 0.011]	0.098*** (0.010) [0.078, 0.118]	0.040*** (0.006) [0.028, 0.052]
Locus of Control	-0.052*** (0.016) [-0.082, -0.021]	-0.017 (0.009) [-0.036, 0.001]	0.023* (0.011) [0.001, 0.044]	0.002 (0.009) [-0.016, 0.019]	0.040* (0.019) [0.002, 0.078]	0.005 (0.011) [-0.017, 0.026]
Self Concept	0.003 (0.014) [-0.024, 0.031]	0.010 (0.009) [-0.008, 0.027]	-0.015 (0.009) [-0.033, 0.003]	-0.004 (0.009) [-0.021, 0.013]	0.012 (0.016) [-0.020, 0.044]	-0.006 (0.009) [-0.024, 0.012]
Non-Cognitive Ability (EXTERNAL)	-0.169*** (0.028) [-0.225, -0.113]	-0.040** (0.016) [-0.071, -0.010]	-0.008 (0.021) [-0.049, 0.033]	-0.019 (0.018) [-0.054, 0.016]	0.148*** (0.043) [0.063, 0.233]	0.088** (0.031) [0.026, 0.149]
Black - not Hispanic	-0.033 (0.025) [-0.083, 0.016]	-0.034** (0.011) [-0.055, -0.013]	-0.011 (0.019) [-0.047, 0.025]	0.042 (0.023) [-0.004, 0.088]	0.008 (0.037) [-0.065, 0.081]	0.029 (0.027) [-0.023, 0.081]
Asian or Pacific Islander	-0.003 (0.036) [-0.075, 0.068]	-0.036* (0.015) [-0.066, -0.007]	-0.050** (0.019) [-0.087, -0.013]	0.002 (0.022) [-0.041, 0.045]	0.057 (0.038) [-0.018, 0.131]	0.031 (0.019) [-0.007, 0.069]
Hispanic or Latino	-0.012 (0.023) [-0.057, 0.033]	-0.008 (0.012) [-0.033, 0.016]	-0.003 (0.016) [-0.034, 0.029]	0.020 (0.016) [-0.011, 0.052]	-0.012 (0.031) [-0.073, 0.049]	0.014 (0.023) [-0.031, 0.059]
Observations	2860	2860	2860	2860	2860	2860

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

**TABLE RBFO\_N3.2E: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2000; Multinomial Logit  
Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 1994

	(1)	(2)	(3)	(4)	(5)	(6)
	One Year or Less	Two or Less Years	Associate's Degree	More Than Two Years	Bachelor's Degree	Graduate Degree
College Varsity and High School BB Varsity Athlete	-0.064 (0.164) [-0.386, 0.258]	-0.063*** (0.004) [-0.072, -0.055]	-0.089*** (0.005) [-0.100, -0.079]	-0.059*** (0.004) [-0.067, -0.050]	0.346* (0.164) [0.025, 0.668]	-0.071*** (0.005) [-0.080, -0.062]
College Varsity Athlete Non BB	-0.111*** (0.033) [-0.176, -0.046]	-0.056*** (0.011) [-0.077, -0.035]	-0.075*** (0.014) [-0.102, -0.047]	0.004 (0.022) [-0.038, 0.047]	0.219*** (0.040) [0.141, 0.297]	0.018 (0.019) [-0.020, 0.056]
Single-Parent Household	0.057** (0.019) [0.021, 0.094]	0.026* (0.012) [0.002, 0.049]	-0.015 (0.012) [-0.038, 0.009]	0.004 (0.011) [-0.017, 0.025]	-0.058** (0.021) [-0.100, -0.017]	-0.014 (0.012) [-0.038, 0.009]
Family Income (\$10K)	-0.006 (0.003) [-0.013, 0.000]	-0.003 (0.002) [-0.008, 0.001]	-0.006* (0.003) [-0.012, -0.001]	0.001 (0.001) [-0.001, 0.004]	0.013*** (0.003) [0.008, 0.019]	0.001 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.023 (0.025) [-0.072, 0.026]	0.006 (0.016) [-0.025, 0.037]	-0.002 (0.019) [-0.038, 0.035]	0.001 (0.016) [-0.030, 0.033]	-0.005 (0.040) [-0.084, 0.073]	0.023 (0.031) [-0.038, 0.084]
Number of Siblings	0.010 (0.005) [-0.000, 0.020]	-0.001 (0.003) [-0.007, 0.005]	-0.006 (0.004) [-0.014, 0.001]	0.007* (0.003) [0.001, 0.013]	-0.006 (0.006) [-0.018, 0.006]	-0.004 (0.003) [-0.010, 0.003]
Father Education	-0.018*** (0.004) [-0.026, -0.011]	0.000 (0.002) [-0.005, 0.005]	-0.005 (0.003) [-0.010, 0.000]	0.000 (0.002) [-0.004, 0.004]	0.018*** (0.004) [0.010, 0.026]	0.006** (0.002) [0.001, 0.010]
Mother Education	-0.007 (0.004) [-0.015, 0.002]	-0.004 (0.003) [-0.010, 0.001]	0.000 (0.003) [-0.005, 0.006]	-0.002 (0.002) [-0.007, 0.003]	0.010* (0.004) [0.001, 0.019]	0.003 (0.002) [-0.002, 0.008]
Urban Location	-0.000 (0.019) [-0.037, 0.036]	0.012 (0.012) [-0.012, 0.036]	-0.013 (0.013) [-0.038, 0.012]	-0.004 (0.010) [-0.024, 0.015]	0.006 (0.020) [-0.033, 0.045]	-0.000 (0.011) [-0.021, 0.021]
Cognitive Ability (Z-Score)	-0.087*** (0.010) [-0.106, -0.068]	-0.019** (0.006) [-0.031, -0.007]	-0.032*** (0.007) [-0.045, -0.019]	-0.000 (0.005) [-0.011, 0.011]	0.098*** (0.010) [0.078, 0.118]	0.040*** (0.006) [0.028, 0.052]
Locus of Control	-0.052*** (0.016) [-0.082, -0.021]	-0.017 (0.009) [-0.036, 0.001]	0.023* (0.011) [0.001, 0.044]	0.001 (0.009) [-0.016, 0.019]	0.040* (0.019) [0.002, 0.078]	0.005 (0.011) [-0.017, 0.026]
Self Concept	0.003 (0.014) [-0.024, 0.031]	0.010 (0.009) [-0.008, 0.027]	-0.015 (0.009) [-0.033, 0.003]	-0.004 (0.009) [-0.021, 0.013]	0.012 (0.016) [-0.020, 0.044]	-0.006 (0.009) [-0.024, 0.012]
Non-Cognitive Ability (EXTERNAL)	-0.169*** (0.028) [-0.225, -0.113]	-0.040** (0.016) [-0.071, -0.010]	-0.008 (0.021) [-0.049, 0.033]	-0.019 (0.018) [-0.054, 0.016]	0.148*** (0.043) [0.063, 0.233]	0.088** (0.031) [0.027, 0.149]
Black - not Hispanic	-0.034 (0.025) [-0.084, 0.016]	-0.034** (0.011) [-0.055, -0.013]	-0.011 (0.019) [-0.047, 0.026]	0.043 (0.023) [-0.003, 0.089]	0.007 (0.037) [-0.067, 0.080]	0.030 (0.027) [-0.023, 0.082]
Asian or Pacific Islander	-0.003 (0.036) [-0.075, 0.068]	-0.036* (0.015) [-0.066, -0.007]	-0.050** (0.019) [-0.087, -0.013]	0.002 (0.022) [-0.041, 0.045]	0.057 (0.038) [-0.018, 0.131]	0.031 (0.019) [-0.006, 0.069]
Hispanic or Latino	-0.012 (0.023) [-0.057, 0.033]	-0.008 (0.012) [-0.033, 0.016]	-0.003 (0.016) [-0.034, 0.029]	0.020 (0.016) [-0.011, 0.052]	-0.012 (0.031) [-0.072, 0.049]	0.014 (0.023) [-0.031, 0.059]
Observations	2860	2860	2860	2860	2860	2860

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10. 95-percent confidence intervals in square brackets.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: NELS.

## TABLE RBFO\_N3.3A: College Graduation

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model  
 Index: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.018 (0.024) [-0.030, 0.066]	
High School Sophomore BB/FB Varsity Athlete			-0.029 (0.039) [-0.105, 0.046]
High School Sophomore Non BB/FB Varsity Athlete			0.028 (0.025) [-0.021, 0.077]
Single-Parent Household	-0.083** (0.031) [-0.144, -0.022]	-0.082** (0.031) [-0.143, -0.021]	-0.083** (0.031) [-0.144, -0.022]
Family Income (\$10K)	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]
Family Income Below Poverty Line	-0.040 (0.058) [-0.154, 0.074]	-0.040 (0.058) [-0.154, 0.075]	-0.036 (0.058) [-0.151, 0.078]
Number of Siblings	-0.020* (0.009) [-0.037, -0.004]	-0.020* (0.009) [-0.037, -0.004]	-0.021* (0.009) [-0.038, -0.004]
Father Education	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.028]
Mother Education	0.007 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.016]
Urban Location	0.022 (0.025) [-0.026, 0.071]	0.023 (0.025) [-0.025, 0.072]	0.023 (0.025) [-0.025, 0.072]
Cognitive Ability (Z-Score)	0.061*** (0.013) [0.036, 0.086]	0.061*** (0.013) [0.036, 0.087]	0.060*** (0.013) [0.035, 0.086]

**TABLE RBFO\_N3.3A: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model  
 Index: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)
Locus of Control	-0.008 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.055, 0.040]	-0.007 (0.024) [-0.055, 0.040]
Self Concept	-0.000 (0.020) [-0.040, 0.040]	-0.001 (0.020) [-0.041, 0.039]	-0.001 (0.021) [-0.042, 0.039]
Non-Cognitive Ability (EXTERNAL)	0.137** (0.043) [0.053, 0.222]	0.137** (0.043) [0.053, 0.222]	0.132** (0.043) [0.048, 0.217]
Black - not Hispanic	-0.068 (0.053) [-0.172, 0.035]	-0.068 (0.053) [-0.172, 0.035]	-0.062 (0.053) [-0.166, 0.041]
American Indian or Alaska Native	-0.295 (0.185) [-0.658, 0.068]	-0.296 (0.185) [-0.658, 0.066]	-0.308 (0.185) [-0.670, 0.055]
Asian or Pacific Islander	0.043 (0.042) [-0.039, 0.126]	0.044 (0.042) [-0.038, 0.126]	0.045 (0.042) [-0.037, 0.127]
Hispanic or Latino	-0.075 (0.046) [-0.165, 0.015]	-0.076 (0.046) [-0.165, 0.014]	-0.078 (0.046) [-0.168, 0.011]
Constant	-0.275 (0.180) [-0.627, 0.078]	-0.286 (0.180) [-0.638, 0.067]	-0.257 (0.180) [-0.610, 0.095]
Observations	1,640	1,640	1,640
Adjusted R-squared	0.115	0.115	0.116

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N3.3B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.012 (0.025) [-0.038, 0.061]	0.020 (0.025) [-0.029, 0.069]	0.001 (0.027) [-0.051, 0.054]			
HS Sophomore Athlete × Black	0.096 (0.105) [-0.109, 0.301]					
HS Sophomore Athlete × Income Below Poverty Line		-0.048 (0.115) [-0.273, 0.176]				
HS Sophomore Athlete × Single-Parent Household			0.083 (0.065) [-0.046, 0.211]			
High School Sophomore BB/FB Varsity Athlete				-0.036 (0.041) [-0.116, 0.044]	-0.028 (0.040) [-0.107, 0.050]	-0.056 (0.043) [-0.140, 0.028]
High School Sophomore Non BB/FB Varsity Athlete				0.021 (0.026) [-0.030, 0.071]	0.030 (0.026) [-0.020, 0.081]	0.013 (0.027) [-0.041, 0.067]
HS Sophomore BB/FB Athlete × Black				0.087 (0.134) [-0.176, 0.350]		
HS Non BB/FB Varsity Athlete × Black				0.117 (0.113) [-0.104, 0.339]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					-0.021 (0.153) [-0.320, 0.278]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.048 (0.123) [-0.290, 0.193]	
HS Sophomore BB/FB Athlete × Single-Parent Household						0.132 (0.100) [-0.063, 0.328]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.074 (0.068) [-0.059, 0.207]
Single-Parent Household	-0.083** (0.031) [-0.144, -0.022]	-0.082** (0.031) [-0.143, -0.021]	-0.140* (0.055) [-0.248, -0.031]	-0.084** (0.031) [-0.145, -0.023]	-0.083** (0.031) [-0.144, -0.022]	-0.141* (0.056) [-0.250, -0.032]
Family Income (\$10K)	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]
Family Income Below Poverty Line	-0.041 (0.058) [-0.155, 0.072]	-0.008 (0.096) [-0.195, 0.180]	-0.041 (0.058) [-0.155, 0.073]	-0.037 (0.058) [-0.152, 0.077]	-0.010 (0.096) [-0.198, 0.178]	-0.041 (0.058) [-0.155, 0.074]
Number of Siblings	-0.020* (0.009) [-0.037, -0.004]	-0.021* (0.009) [-0.037, -0.004]	-0.020* (0.009) [-0.037, -0.003]	-0.021* (0.009) [-0.038, -0.004]	-0.021* (0.009) [-0.038, -0.004]	-0.020* (0.009) [-0.037, -0.003]

**TABLE RBFO\_N3.3B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.028]
Mother Education	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.016]	0.006 (0.005) [-0.004, 0.016]	0.006 (0.005) [-0.005, 0.016]
Urban Location	0.023 (0.025) [-0.025, 0.072]	0.023 (0.025) [-0.026, 0.071]	0.025 (0.025) [-0.023, 0.074]	0.023 (0.025) [-0.025, 0.072]	0.023 (0.025) [-0.026, 0.071]	0.025 (0.025) [-0.023, 0.074]
Cognitive Ability (Z-Score)	0.062*** (0.013) [0.036, 0.087]	0.062*** (0.013) [0.036, 0.087]	0.061*** (0.013) [0.036, 0.087]	0.060*** (0.013) [0.035, 0.086]	0.060*** (0.013) [0.035, 0.086]	0.060*** (0.013) [0.035, 0.086]
Locus of Control	-0.008 (0.024) [-0.055, 0.039]	-0.007 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.055, 0.039]	-0.008 (0.024) [-0.055, 0.039]	-0.007 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.055, 0.039]
Self Concept	-0.001 (0.020) [-0.041, 0.039]	-0.001 (0.020) [-0.042, 0.039]	-0.001 (0.020) [-0.042, 0.039]	-0.001 (0.021) [-0.041, 0.039]	-0.002 (0.021) [-0.042, 0.039]	-0.002 (0.021) [-0.042, 0.039]
Non-Cognitive Ability (EXTERNAL)	0.138** (0.043) [0.053, 0.222]	0.138** (0.043) [0.053, 0.222]	0.133** (0.043) [0.048, 0.218]	0.132** (0.043) [0.048, 0.216]	0.133** (0.043) [0.049, 0.217]	0.128** (0.043) [0.043, 0.213]
Black - not Hispanic	-0.135 (0.089) [-0.309, 0.039]	-0.067 (0.053) [-0.170, 0.036]	-0.070 (0.053) [-0.174, 0.033]	-0.137 (0.089) [-0.311, 0.037]	-0.062 (0.053) [-0.166, 0.042]	-0.066 (0.053) [-0.169, 0.037]
American Indian or Alaska Native	-0.295 (0.185) [-0.657, 0.067]	-0.293 (0.184) [-0.654, 0.068]	-0.301 (0.187) [-0.668, 0.065]	-0.307 (0.185) [-0.670, 0.056]	-0.304 (0.185) [-0.666, 0.059]	-0.311 (0.186) [-0.677, 0.055]
Asian or Pacific Islander	0.044 (0.042) [-0.038, 0.126]	0.042 (0.042) [-0.040, 0.125]	0.044 (0.042) [-0.039, 0.126]	0.044 (0.042) [-0.038, 0.126]	0.043 (0.042) [-0.039, 0.125]	0.044 (0.042) [-0.038, 0.127]
Hispanic or Latino	-0.075 (0.046) [-0.165, 0.015]	-0.076 (0.046) [-0.165, 0.014]	-0.076 (0.046) [-0.165, 0.014]	-0.078 (0.046) [-0.168, 0.012]	-0.078 (0.046) [-0.168, 0.012]	-0.077 (0.046) [-0.167, 0.014]
Constant	-0.282 (0.180) [-0.635, 0.070]	-0.289 (0.180) [-0.642, 0.064]	-0.254 (0.183) [-0.612, 0.104]	-0.249 (0.180) [-0.602, 0.104]	-0.261 (0.180) [-0.615, 0.093]	-0.226 (0.182) [-0.583, 0.132]
Observations	1,640	1,640	1,640	1,640	1,640	1,640
Adjusted R-squared	0.115	0.114	0.115	0.115	0.115	0.116

**TABLE RBFO\_N3.3B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.107 (0.102)					
Incremental Effect of HS Athletics for Income Below Poverty Line		-0.028 (0.112)				
Incremental Effect of HS Athletics for Single-Parent Household			0.084 (0.060)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.051 (0.128)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					-0.049 (0.147)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.076 (0.090)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
 Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.



**TABLE RBFO\_N3.3C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.061* (0.028) [0.006, 0.115]	0.071 (0.040) [-0.007, 0.148]	0.074* (0.032) [0.011, 0.137]			
College Varsity and High School BB/FB Varsity Athlete				0.072 (0.082) [-0.088, 0.233]	0.046 (0.111) [-0.171, 0.264]	0.067 (0.095) [-0.119, 0.254]
College Varsity Athlete Non BB/FB				0.059* (0.029) [0.002, 0.116]	0.074 (0.041) [-0.007, 0.155]	0.075* (0.033) [0.010, 0.140]
College Varsity Athlete × Division 1		-0.010 (0.055) [-0.117, 0.097]				
College Varsity Athlete × FBS			-0.033 (0.065) [-0.161, 0.095]			
College BB/FB Varsity Athlete × Division 1					0.084 (0.160) [-0.229, 0.397]	
College BB/FB Varsity Athlete × FBS						0.036 (0.185) [-0.327, 0.398]
College Varsity Athlete Non BB/FB × Division 1					-0.021 (0.057) [-0.133, 0.090]	
College Varsity Athlete Non BB/FB × FBS						-0.044 (0.068) [-0.178, 0.089]
NCAA Division 1 School		0.042 (0.025) [-0.007, 0.091]			0.042 (0.025) [-0.007, 0.091]	
NCAA Division 1-A (FBS) School			0.045 (0.025) [-0.004, 0.095]			0.045 (0.025) [-0.005, 0.095]
Single-Parent Household	-0.083** (0.031) [-0.144, -0.022]	-0.083** (0.031) [-0.144, -0.022]	-0.083** (0.031) [-0.144, -0.022]	-0.083** (0.031) [-0.144, -0.022]	-0.084** (0.031) [-0.145, -0.023]	-0.083** (0.031) [-0.144, -0.022]
Family Income (\$10K)	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.017]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]
Family Income Below Poverty Line	-0.034 (0.058) [-0.148, 0.081]	-0.035 (0.058) [-0.149, 0.080]	-0.033 (0.058) [-0.148, 0.081]	-0.033 (0.058) [-0.148, 0.081]	-0.035 (0.058) [-0.149, 0.080]	-0.033 (0.058) [-0.148, 0.081]
Number of Siblings	-0.021* (0.009) [-0.037, -0.004]	-0.021* (0.009) [-0.038, -0.004]	-0.021* (0.009) [-0.038, -0.004]	-0.021* (0.009) [-0.037, -0.004]	-0.021* (0.009) [-0.038, -0.004]	-0.021* (0.009) [-0.037, -0.004]
Father Education	0.019*** (0.005) [0.009, 0.029]	0.018*** (0.005) [0.008, 0.028]	0.018*** (0.005) [0.008, 0.028]	0.019*** (0.005) [0.009, 0.029]	0.018*** (0.005) [0.008, 0.028]	0.018*** (0.005) [0.008, 0.028]

**TABLE RBFO\_N3.3C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.005, 0.016]	0.006 (0.005) [-0.005, 0.016]	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.005, 0.016]	0.006 (0.005) [-0.005, 0.016]
Urban Location	0.024 (0.025) [-0.025, 0.072]	0.020 (0.025) [-0.028, 0.069]	0.022 (0.025) [-0.026, 0.070]	0.024 (0.025) [-0.025, 0.072]	0.020 (0.025) [-0.028, 0.069]	0.022 (0.025) [-0.026, 0.070]
Cognitive Ability (Z-Score)	0.063*** (0.013) [0.037, 0.088]	0.061*** (0.013) [0.035, 0.086]	0.061*** (0.013) [0.035, 0.086]	0.063*** (0.013) [0.037, 0.088]	0.061*** (0.013) [0.036, 0.087]	0.061*** (0.013) [0.035, 0.086]
Locus of Control	-0.008 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.056, 0.039]	-0.008 (0.024) [-0.056, 0.039]	-0.008 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.056, 0.040]	-0.008 (0.024) [-0.055, 0.040]
Self Concept	-0.003 (0.020) [-0.043, 0.037]	-0.005 (0.020) [-0.045, 0.035]	-0.004 (0.020) [-0.044, 0.036]	-0.003 (0.020) [-0.043, 0.037]	-0.005 (0.021) [-0.045, 0.035]	-0.004 (0.021) [-0.044, 0.036]
Non-Cognitive Ability (EXTERNAL)	0.136** (0.043) [0.052, 0.221]	0.134** (0.043) [0.050, 0.219]	0.134** (0.043) [0.050, 0.219]	0.136** (0.043) [0.052, 0.221]	0.135** (0.043) [0.051, 0.220]	0.135** (0.043) [0.051, 0.219]
Black - not Hispanic	-0.073 (0.053) [-0.176, 0.031]	-0.075 (0.053) [-0.178, 0.028]	-0.071 (0.053) [-0.174, 0.032]	-0.073 (0.053) [-0.176, 0.030]	-0.074 (0.053) [-0.177, 0.029]	-0.071 (0.053) [-0.174, 0.032]
American Indian or Alaska Native	-0.297 (0.188) [-0.666, 0.072]	-0.304 (0.194) [-0.685, 0.078]	-0.299 (0.192) [-0.675, 0.077]	-0.297 (0.188) [-0.666, 0.073]	-0.302 (0.194) [-0.682, 0.079]	-0.297 (0.191) [-0.673, 0.078]
Asian or Pacific Islander	0.049 (0.042) [-0.033, 0.131]	0.045 (0.042) [-0.038, 0.127]	0.047 (0.042) [-0.035, 0.130]	0.049 (0.042) [-0.033, 0.131]	0.044 (0.042) [-0.038, 0.127]	0.048 (0.042) [-0.035, 0.130]
Hispanic or Latino	-0.073 (0.046) [-0.163, 0.017]	-0.075 (0.046) [-0.165, 0.016]	-0.075 (0.046) [-0.166, 0.015]	-0.072 (0.046) [-0.163, 0.018]	-0.074 (0.046) [-0.165, 0.017]	-0.075 (0.046) [-0.165, 0.015]
Constant	-0.275 (0.179) [-0.627, 0.077]	-0.275 (0.180) [-0.628, 0.077]	-0.272 (0.179) [-0.624, 0.080]	-0.276 (0.179) [-0.628, 0.076]	-0.279 (0.180) [-0.631, 0.074]	-0.273 (0.179) [-0.625, 0.079]
Observations	1,640	1,640	1,640	1,640	1,640	1,640
Adjusted R-squared	0.117	0.118	0.117	0.116	0.117	0.116

**TABLE RBFO\_N3.3C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.061 (0.038)				
Incremental Effect of College Athletics for FBS Students			0.041 (0.057)			
Incremental Effect of College BB/FB Athletics for Division I Students					0.130 (0.115)	
Incremental Effect of College BB/FB Athletics for FBS Students						0.103 (0.159)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N3.3D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.063* (0.029) [0.006, 0.119]	0.061* (0.028) [0.006, 0.117]	0.056 (0.030) [-0.003, 0.116]			
College Varsity and High School BB/FB Varsity Athlete				0.049 (0.087) [-0.122, 0.220]	0.072 (0.082) [-0.088, 0.233]	0.061 (0.097) [-0.128, 0.251]
College Varsity Athlete Non BB/FB				0.064* (0.030) [0.006, 0.123]	0.060* (0.029) [0.002, 0.117]	0.055 (0.031) [-0.006, 0.117]
College Varsity Athlete × Black	-0.024 (0.111) [-0.242, 0.195]					
College Varsity Athlete × Income Below Poverty Line		-0.027 (0.171) [-0.363, 0.309]				
College Varsity Athlete × Single-Parent Household			0.024 (0.074) [-0.122, 0.169]			
College BB/FB Varsity Athlete × Black				0.154 (0.245) [-0.327, 0.635]		
College BB/FB Varsity Athlete × Single-Parent Household						0.047 (0.177) [-0.299, 0.393]
College Varsity Athlete Non BB/FB × Black				-0.062 (0.118) [-0.294, 0.169]		
College Varsity Athlete Non BB/FB × Income Below Poverty Line					-0.025 (0.171) [-0.362, 0.311]	
College Varsity Athlete Non BB/FB × Single-Parent Household						0.019 (0.080) [-0.137, 0.176]
Single-Parent Household	-0.083** (0.031) [-0.144, -0.022]	-0.083** (0.031) [-0.144, -0.022]	-0.088* (0.034) [-0.155, -0.020]	-0.083** (0.031) [-0.144, -0.022]	-0.083** (0.031) [-0.144, -0.022]	-0.088* (0.034) [-0.155, -0.020]
Family Income (\$10K)	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.017]	0.011*** (0.003) [0.006, 0.017]
Family Income Below Poverty Line	-0.034 (0.058) [-0.148, 0.080]	-0.031 (0.061) [-0.151, 0.089]	-0.033 (0.058) [-0.148, 0.081]	-0.032 (0.058) [-0.147, 0.082]	-0.031 (0.061) [-0.151, 0.090]	-0.033 (0.058) [-0.148, 0.082]
Number of Siblings	-0.021* (0.009) [-0.037, -0.004]	-0.021* (0.009) [-0.038, -0.004]	-0.021* (0.009) [-0.037, -0.004]	-0.021* (0.009) [-0.038, -0.004]	-0.021* (0.009) [-0.038, -0.004]	-0.021* (0.009) [-0.037, -0.004]
Father Education	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]	0.019*** (0.005) [0.009, 0.029]

**TABLE RBFO\_N3.3D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.017]	0.006 (0.005) [-0.004, 0.017]
Urban Location	0.024 (0.025) [-0.025, 0.072]	0.024 (0.025) [-0.025, 0.072]	0.023 (0.025) [-0.025, 0.072]	0.024 (0.025) [-0.025, 0.072]	0.024 (0.025) [-0.025, 0.072]	0.023 (0.025) [-0.025, 0.072]
Cognitive Ability (Z-Score)	0.063*** (0.013) [0.037, 0.088]	0.063*** (0.013) [0.037, 0.088]	0.063*** (0.013) [0.037, 0.088]	0.063*** (0.013) [0.037, 0.088]	0.063*** (0.013) [0.037, 0.088]	0.063*** (0.013) [0.037, 0.088]
Locus of Control	-0.008 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.056, 0.039]	-0.007 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.055, 0.040]	-0.008 (0.024) [-0.056, 0.039]
Self Concept	-0.003 (0.020) [-0.043, 0.037]	-0.003 (0.020) [-0.043, 0.037]	-0.003 (0.020) [-0.043, 0.037]	-0.004 (0.021) [-0.044, 0.037]	-0.003 (0.021) [-0.043, 0.037]	-0.003 (0.020) [-0.043, 0.037]
Non-Cognitive Ability (EXTERNAL)	0.136** (0.043) [0.052, 0.221]	0.136** (0.043) [0.052, 0.221]	0.136** (0.043) [0.052, 0.221]	0.137** (0.043) [0.053, 0.222]	0.137** (0.043) [0.052, 0.221]	0.136** (0.043) [0.052, 0.221]
Black - not Hispanic	-0.067 (0.060) [-0.185, 0.051]	-0.073 (0.053) [-0.176, 0.031]	-0.073 (0.053) [-0.176, 0.030]	-0.067 (0.060) [-0.185, 0.051]	-0.073 (0.053) [-0.176, 0.031]	-0.073 (0.053) [-0.176, 0.031]
American Indian or Alaska Native	-0.297 (0.188) [-0.667, 0.072]	-0.297 (0.189) [-0.667, 0.072]	-0.296 (0.188) [-0.665, 0.073]	-0.297 (0.189) [-0.667, 0.073]	-0.297 (0.189) [-0.667, 0.073]	-0.296 (0.188) [-0.665, 0.073]
Asian or Pacific Islander	0.049 (0.042) [-0.033, 0.132]	0.049 (0.042) [-0.033, 0.131]	0.049 (0.042) [-0.034, 0.131]	0.049 (0.042) [-0.033, 0.131]	0.049 (0.042) [-0.033, 0.131]	0.049 (0.042) [-0.034, 0.131]
Hispanic or Latino	-0.073 (0.046) [-0.163, 0.018]	-0.073 (0.046) [-0.163, 0.018]	-0.073 (0.046) [-0.163, 0.017]	-0.073 (0.046) [-0.163, 0.018]	-0.072 (0.046) [-0.163, 0.018]	-0.073 (0.046) [-0.163, 0.018]
Constant	-0.275 (0.179) [-0.627, 0.077]	-0.275 (0.180) [-0.628, 0.077]	-0.275 (0.179) [-0.627, 0.077]	-0.281 (0.179) [-0.633, 0.071]	-0.276 (0.180) [-0.629, 0.076]	-0.275 (0.179) [-0.627, 0.077]
Observations	1,640	1,640	1,640	1,640	1,640	1,640
Adjusted R-squared	0.116	0.116	0.116	0.116	0.116	0.115

**TABLE RBFO\_N3.3D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.039 (0.108)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.034 (0.169)				
Incremental Effect of College Athletics for Single-Parent Household			0.080 (0.068)			
Incremental Effect of College BB/FB Athletics for Blacks				0.203 (0.229)		
Incremental Effect of College BB/FB Athletics for Income Below Poverty Line					0.072 (0.082)	
Incremental Effect of College BB/FB Athletics for Single-Parent Household						0.108 (0.148)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

## TABLE RBFO\_N3.4A: College Graduation

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.065** (0.020) [0.025 , 0.105]	
High School Sophomore BB Varsity Athlete			-0.061 (0.074) [-0.206 , 0.084]
High School Sophomore Non BB Varsity Athlete			0.071*** (0.021) [0.031 , 0.112]
Single-Parent Household	-0.074** (0.027) [-0.127 , -0.020]	-0.074** (0.027) [-0.127 , -0.020]	-0.074** (0.027) [-0.127 , -0.020]
Family Income (\$10K)	0.005* (0.002) [0.001 , 0.010]	0.005* (0.002) [0.000 , 0.009]	0.005* (0.002) [0.000 , 0.009]
Family Income Below Poverty Line	0.001 (0.050) [-0.097 , 0.099]	-0.002 (0.050) [-0.099 , 0.096]	0.001 (0.050) [-0.096 , 0.098]
Number of Siblings	-0.010 (0.008) [-0.025 , 0.005]	-0.010 (0.008) [-0.025 , 0.004]	-0.010 (0.008) [-0.025 , 0.005]
Father Education	0.023*** (0.004) [0.014 , 0.031]	0.023*** (0.004) [0.014 , 0.031]	0.022*** (0.004) [0.014 , 0.031]
Mother Education	0.009 (0.005) [-0.001 , 0.018]	0.007 (0.005) [-0.002 , 0.017]	0.007 (0.005) [-0.002 , 0.017]
Urban Location	0.002 (0.021) [-0.039 , 0.043]	0.007 (0.021) [-0.034 , 0.048]	0.005 (0.021) [-0.036 , 0.046]
Cognitive Ability (Z-Score)	0.082*** (0.013) [0.057 , 0.107]	0.083*** (0.013) [0.058 , 0.107]	0.082*** (0.013) [0.057 , 0.107]

## TABLE RBFO\_N3.4A: College Graduation

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)
Locus of Control	0.046* (0.022) [0.002, 0.089]	0.043 (0.022) [-0.000, 0.087]	0.045* (0.022) [0.001, 0.088]
Self Concept	-0.013 (0.019) [-0.050, 0.024]	-0.017 (0.019) [-0.054, 0.020]	-0.018 (0.019) [-0.055, 0.019]
Non-Cognitive Ability (EXTERNAL)	0.221*** (0.051) [0.122, 0.320]	0.216*** (0.051) [0.117, 0.316]	0.214*** (0.051) [0.114, 0.313]
Black - not Hispanic	-0.028 (0.043) [-0.112, 0.056]	-0.012 (0.043) [-0.097, 0.073]	-0.008 (0.043) [-0.093, 0.078]
American Indian or Alaska Native	-0.108 (0.134) [-0.370, 0.155]	-0.100 (0.138) [-0.371, 0.171]	-0.101 (0.139) [-0.374, 0.171]
Asian or Pacific Islander	0.057 (0.030) [-0.003, 0.116]	0.068* (0.031) [0.008, 0.128]	0.069* (0.031) [0.008, 0.129]
Hispanic or Latino	-0.045 (0.041) [-0.126, 0.035]	-0.036 (0.041) [-0.116, 0.044]	-0.035 (0.041) [-0.115, 0.044]
Constant	-0.635** (0.209) [-1.044, -0.226]	-0.634** (0.209) [-1.044, -0.224]	-0.622** (0.209) [-1.032, -0.212]
Observations	1,880	1,880	1,880
Adjusted R-squared	0.136	0.140	0.142

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.



**TABLE RBFO\_N3.4B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.073*** (0.021) [0.031, 0.114]	0.061** (0.021) [0.020, 0.102]	0.068** (0.022) [0.025, 0.112]			
HS Sophomore Athlete × Black	-0.098 (0.084) [-0.263, 0.067]					
HS Sophomore Athlete × Income Below Poverty Line		0.066 (0.091) [-0.112, 0.245]				
HS Sophomore Athlete × Single-Parent Household			-0.016 (0.053) [-0.120, 0.089]			
High School Sophomore BB Varsity Athlete				-0.099 (0.077) [-0.250, 0.051]	-0.044 (0.080) [-0.200, 0.112]	-0.119 (0.082) [-0.280, 0.043]
High School Sophomore Non BB Varsity Athlete				0.080*** (0.021) [0.038, 0.121]	0.065** (0.021) [0.024, 0.107]	0.076*** (0.022) [0.033, 0.120]
HS Sophomore BB Athlete × Black				0.248 (0.224) [-0.192, 0.688]		
HS Non BB Varsity Athlete × Black				-0.131 (0.086) [-0.298, 0.037]		
HS Sophomore BB Athlete × Income Below Poverty Line					-0.117 (0.209) [-0.526, 0.292]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.098 (0.092) [-0.083, 0.280]	
HS Sophomore BB Athlete × Single-Parent Household						0.240 (0.172) [-0.099, 0.578]
HS Non BB Varsity Athlete × Single-Parent Household						-0.027 (0.054) [-0.133, 0.078]
Single-Parent Household	-0.073** (0.027) [-0.126, -0.019]	-0.075** (0.027) [-0.129, -0.021]	-0.065 (0.042) [-0.147, 0.017]	-0.073** (0.027) [-0.127, -0.020]	-0.075** (0.027) [-0.129, -0.021]	-0.065 (0.042) [-0.147, 0.017]
Family Income (\$10K)	0.004* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]
Family Income Below Poverty Line	-0.004 (0.050) [-0.101, 0.094]	-0.034 (0.068) [-0.168, 0.100]	-0.002 (0.050) [-0.099, 0.096]	-0.003 (0.049) [-0.099, 0.093]	-0.035 (0.068) [-0.170, 0.099]	-0.001 (0.050) [-0.098, 0.097]
Number of Siblings	-0.010 (0.008) [-0.025, 0.005]	-0.010 (0.008) [-0.025, 0.005]	-0.011 (0.008) [-0.026, 0.004]	-0.010 (0.008) [-0.025, 0.005]	-0.010 (0.008) [-0.025, 0.005]	-0.010 (0.008) [-0.025, 0.005]

**TABLE RBFO\_N3.4B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.023*** (0.004) [0.014, 0.031]	0.023*** (0.004) [0.014, 0.031]	0.023*** (0.004) [0.014, 0.031]	0.022*** (0.004) [0.014, 0.031]	0.023*** (0.004) [0.014, 0.031]	0.022*** (0.004) [0.014, 0.031]
Mother Education	0.007 (0.005) [-0.003, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.003, 0.017]	0.007 (0.005) [-0.002, 0.017]	0.007 (0.005) [-0.003, 0.017]
Urban Location	0.007 (0.021) [-0.034, 0.048]	0.007 (0.021) [-0.034, 0.049]	0.007 (0.021) [-0.034, 0.048]	0.006 (0.021) [-0.035, 0.047]	0.006 (0.021) [-0.035, 0.048]	0.004 (0.021) [-0.038, 0.045]
Cognitive Ability (Z-Score)	0.082*** (0.013) [0.058, 0.107]	0.082*** (0.013) [0.058, 0.107]	0.083*** (0.013) [0.058, 0.107]	0.082*** (0.013) [0.058, 0.107]	0.082*** (0.013) [0.057, 0.107]	0.082*** (0.013) [0.057, 0.107]
Locus of Control	0.043 (0.022) [-0.001, 0.086]	0.043 (0.022) [-0.000, 0.087]	0.044 (0.022) [-0.000, 0.087]	0.044* (0.022) [0.001, 0.088]	0.045* (0.022) [0.002, 0.089]	0.047* (0.022) [0.003, 0.090]
Self Concept	-0.016 (0.019) [-0.053, 0.021]	-0.017 (0.019) [-0.054, 0.021]	-0.017 (0.019) [-0.054, 0.020]	-0.017 (0.019) [-0.054, 0.020]	-0.018 (0.019) [-0.055, 0.020]	-0.018 (0.019) [-0.056, 0.019]
Non-Cognitive Ability (EXTERNAL)	0.214*** (0.051) [0.115, 0.313]	0.216*** (0.051) [0.116, 0.316]	0.216*** (0.051) [0.117, 0.316]	0.214*** (0.051) [0.115, 0.313]	0.213*** (0.051) [0.113, 0.312]	0.217*** (0.051) [0.118, 0.317]
Black - not Hispanic	0.025 (0.055) [-0.082, 0.133]	-0.011 (0.043) [-0.096, 0.074]	-0.012 (0.043) [-0.097, 0.072]	0.026 (0.055) [-0.082, 0.133]	-0.005 (0.044) [-0.091, 0.080]	-0.010 (0.043) [-0.095, 0.075]
American Indian or Alaska Native	-0.099 (0.139) [-0.371, 0.174]	-0.100 (0.138) [-0.370, 0.171]	-0.101 (0.139) [-0.373, 0.172]	-0.102 (0.140) [-0.376, 0.172]	-0.101 (0.139) [-0.373, 0.171]	-0.103 (0.140) [-0.377, 0.171]
Asian or Pacific Islander	0.069* (0.031) [0.009, 0.129]	0.067* (0.031) [0.007, 0.127]	0.068* (0.031) [0.008, 0.128]	0.070* (0.031) [0.010, 0.130]	0.066* (0.031) [0.006, 0.126]	0.069* (0.031) [0.009, 0.129]
Hispanic or Latino	-0.034 (0.041) [-0.114, 0.045]	-0.034 (0.041) [-0.114, 0.046]	-0.035 (0.041) [-0.115, 0.044]	-0.033 (0.041) [-0.113, 0.046]	-0.034 (0.041) [-0.114, 0.046]	-0.032 (0.041) [-0.112, 0.047]
Constant	-0.631** (0.209) [-1.040, -0.221]	-0.633** (0.210) [-1.044, -0.222]	-0.636** (0.209) [-1.045, -0.227]	-0.624** (0.208) [-1.033, -0.215]	-0.620** (0.210) [-1.030, -0.209]	-0.636** (0.209) [-1.046, -0.227]
Observations	1,880	1,880	1,880	1,880	1,880	1,880
Adjusted R-squared	0.141	0.140	0.140	0.144	0.142	0.142

**TABLE RBFO\_N3.4B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.025 (0.081)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.127 (0.089)				
Incremental Effect of HS Athletics for Single-Parent Household			0.053 (0.049)			
Incremental Effect of HS BB Athletics for Blacks				0.149 (0.211)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					-0.161 (0.193)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.121 (0.151)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N3.4C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.109*** (0.028) [0.053, 0.164]	0.161*** (0.038) [0.087, 0.236]	0.135*** (0.032) [0.072, 0.197]			
College Varsity and High School BB Varsity Athlete				0.190 (0.210) [-0.221, 0.601]	0.137 (0.240) [-0.335, 0.608]	0.117 (0.240) [-0.353, 0.587]
College Varsity Athlete Non BB				0.106*** (0.028) [0.051, 0.162]	0.162*** (0.038) [0.087, 0.237]	0.135*** (0.032) [0.072, 0.198]
College Varsity Athlete × Division 1		-0.106 (0.056) [-0.215, 0.004]				
College Varsity Athlete × FBS			-0.086 (0.066) [-0.216, 0.043]			
College BB Varsity Athlete × Division 1					0.383 (0.248) [-0.105, 0.870]	
College BB Varsity Athlete × FBS						0.375 (0.248) [-0.111, 0.862]
College Varsity Athlete Non BB × Division 1					-0.113* (0.056) [-0.223, -0.004]	
College Varsity Athlete Non BB × FBS						-0.101 (0.066) [-0.231, 0.029]
NCAA Division 1 School		0.081*** (0.021) [0.040, 0.123]			0.081*** (0.021) [0.039, 0.123]	
NCAA Division 1-A (FBS) School			0.080*** (0.021) [0.038, 0.121]			0.079*** (0.021) [0.038, 0.121]
Single-Parent Household	-0.071** (0.027) [-0.125, -0.017]	-0.074** (0.027) [-0.127, -0.020]	-0.074** (0.027) [-0.127, -0.020]	-0.071** (0.027) [-0.125, -0.017]	-0.075** (0.027) [-0.128, -0.021]	-0.075** (0.027) [-0.128, -0.021]
Family Income (\$10K)	0.005* (0.002) [0.001, 0.009]	0.004* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.001, 0.009]	0.005* (0.002) [0.000, 0.009]	0.005* (0.002) [0.000, 0.009]
Family Income Below Poverty Line	-0.001 (0.050) [-0.098, 0.097]	0.005 (0.050) [-0.092, 0.102]	0.003 (0.049) [-0.094, 0.100]	-0.001 (0.050) [-0.099, 0.096]	0.001 (0.050) [-0.097, 0.099]	-0.001 (0.050) [-0.098, 0.097]
Number of Siblings	-0.010 (0.008) [-0.025, 0.005]	-0.011 (0.008) [-0.026, 0.004]	-0.012 (0.008) [-0.027, 0.003]	-0.010 (0.008) [-0.025, 0.005]	-0.011 (0.008) [-0.026, 0.004]	-0.012 (0.008) [-0.027, 0.003]
Father Education	0.022*** (0.004) [0.014, 0.031]	0.022*** (0.004) [0.013, 0.030]	0.021*** (0.004) [0.013, 0.030]	0.022*** (0.004) [0.014, 0.031]	0.021*** (0.004) [0.013, 0.030]	0.021*** (0.004) [0.013, 0.029]

**TABLE RBFO\_N3.4C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.008 (0.005) [-0.002, 0.018]	0.007 (0.005) [-0.002, 0.017]	0.008 (0.005) [-0.002, 0.017]	0.008 (0.005) [-0.002, 0.018]	0.008 (0.005) [-0.002, 0.017]	0.008 (0.005) [-0.002, 0.017]
Urban Location	0.003 (0.021) [-0.038, 0.044]	-0.001 (0.021) [-0.042, 0.041]	0.002 (0.021) [-0.039, 0.044]	0.003 (0.021) [-0.038, 0.044]	-0.001 (0.021) [-0.043, 0.040]	0.002 (0.021) [-0.040, 0.043]
Cognitive Ability (Z-Score)	0.084*** (0.013) [0.059, 0.109]	0.081*** (0.013) [0.056, 0.106]	0.080*** (0.013) [0.055, 0.105]	0.084*** (0.013) [0.059, 0.109]	0.081*** (0.013) [0.056, 0.106]	0.080*** (0.013) [0.055, 0.105]
Locus of Control	0.048* (0.022) [0.004, 0.091]	0.049* (0.022) [0.005, 0.092]	0.047* (0.022) [0.004, 0.090]	0.048* (0.022) [0.004, 0.091]	0.049* (0.022) [0.005, 0.092]	0.047* (0.022) [0.004, 0.091]
Self Concept	-0.016 (0.019) [-0.053, 0.021]	-0.019 (0.019) [-0.056, 0.018]	-0.019 (0.019) [-0.056, 0.018]	-0.016 (0.019) [-0.053, 0.021]	-0.018 (0.019) [-0.055, 0.019]	-0.019 (0.019) [-0.056, 0.018]
Non-Cognitive Ability (EXTERNAL)	0.217*** (0.050) [0.118, 0.316]	0.216*** (0.051) [0.117, 0.315]	0.215*** (0.051) [0.115, 0.314]	0.217*** (0.050) [0.118, 0.316]	0.216*** (0.051) [0.116, 0.315]	0.215*** (0.051) [0.115, 0.314]
Black - not Hispanic	-0.024 (0.043) [-0.108, 0.059]	-0.029 (0.042) [-0.112, 0.054]	-0.020 (0.042) [-0.103, 0.063]	-0.025 (0.043) [-0.109, 0.059]	-0.031 (0.042) [-0.115, 0.052]	-0.022 (0.043) [-0.106, 0.061]
American Indian or Alaska Native	-0.110 (0.137) [-0.379, 0.159]	-0.123 (0.134) [-0.386, 0.139]	-0.129 (0.137) [-0.398, 0.139]	-0.110 (0.137) [-0.379, 0.159]	-0.123 (0.134) [-0.385, 0.140]	-0.128 (0.136) [-0.395, 0.140]
Asian or Pacific Islander	0.067* (0.031) [0.006, 0.127]	0.051 (0.031) [-0.010, 0.112]	0.062* (0.031) [0.002, 0.122]	0.067* (0.031) [0.006, 0.127]	0.051 (0.031) [-0.010, 0.112]	0.062* (0.031) [0.002, 0.123]
Hispanic or Latino	-0.041 (0.041) [-0.121, 0.039]	-0.049 (0.041) [-0.129, 0.030]	-0.045 (0.041) [-0.125, 0.035]	-0.041 (0.041) [-0.121, 0.039]	-0.048 (0.041) [-0.128, 0.031]	-0.044 (0.041) [-0.124, 0.036]
Constant	-0.618** (0.208) [-1.025, -0.210]	-0.629** (0.208) [-1.038, -0.220]	-0.604** (0.209) [-1.013, -0.194]	-0.617** (0.208) [-1.025, -0.209]	-0.628** (0.209) [-1.037, -0.218]	-0.602** (0.209) [-1.012, -0.193]
Observations	1,880	1,880	1,880	1,880	1,880	1,880
Adjusted R-squared	0.141	0.147	0.145	0.140	0.147	0.145

**TABLE RBFO\_N3.4C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.055 (0.041)				
Incremental Effect of College Athletics for FBS Students			0.048 (0.058)			
Incremental Effect of College BB Athletics for Division I Students					0.519*** (0.062)	
Incremental Effect of College BB Athletics for FBS Students						0.492*** (0.063)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N3.4D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.101*** (0.029) [0.045, 0.157]	0.100*** (0.028) [0.045, 0.156]	0.096** (0.030) [0.038, 0.155]			
College Varsity and High School BB Varsity Athlete				-0.035 (0.280) [-0.585, 0.514]	0.098 (0.240) [-0.373, 0.569]	0.097 (0.240) [-0.374, 0.568]
College Varsity Athlete Non BB				0.103*** (0.029) [0.047, 0.159]	0.100*** (0.028) [0.045, 0.156]	0.096** (0.030) [0.037, 0.155]
College Varsity Athlete × Black	0.122 (0.141) [-0.155, 0.399]					
College Varsity Athlete × Income Below Poverty Line		0.180 (0.169) [-0.152, 0.512]				
College Varsity Athlete × Single-Parent Household			0.083 (0.084) [-0.081, 0.248]			
College BB Varsity Athlete × Black				0.569* (0.285) [0.010, 1.129]		
College BB Varsity Athlete × Income Below Poverty Line					0.474 (0.248) [-0.012, 0.960]	
College BB Varsity Athlete × Single-Parent Household						0.469 (0.248) [-0.017, 0.954]
College Varsity Athlete Non BB × Black				0.051 (0.160) [-0.264, 0.366]		
College Varsity Athlete Non BB × Income Below Poverty Line					0.139 (0.186) [-0.226, 0.504]	
College Varsity Athlete Non BB × Single-Parent Household						0.068 (0.085) [-0.099, 0.235]
Single-Parent Household	-0.071** (0.027) [-0.125, -0.017]	-0.071** (0.027) [-0.125, -0.018]	-0.078** (0.029) [-0.134, -0.021]	-0.071** (0.027) [-0.125, -0.018]	-0.072** (0.027) [-0.126, -0.018]	-0.077** (0.029) [-0.134, -0.020]
Family Income (\$10K)	0.005* (0.002) [0.001, 0.009]	0.005* (0.002) [0.001, 0.009]	0.005* (0.002) [0.001, 0.009]	0.005* (0.002) [0.001, 0.009]	0.005* (0.002) [0.001, 0.009]	0.005* (0.002) [0.001, 0.009]
Family Income Below Poverty Line	-0.002 (0.050) [-0.100, 0.095]	-0.013 (0.051) [-0.114, 0.087]	-0.001 (0.050) [-0.099, 0.096]	-0.004 (0.050) [-0.101, 0.093]	-0.013 (0.051) [-0.114, 0.087]	-0.004 (0.050) [-0.103, 0.094]
Number of Siblings	-0.010 (0.008) [-0.025, 0.005]	-0.010 (0.008) [-0.025, 0.005]	-0.010 (0.008) [-0.025, 0.005]	-0.010 (0.008) [-0.025, 0.005]	-0.010 (0.008) [-0.025, 0.005]	-0.010 (0.008) [-0.025, 0.005]

**TABLE RBFO\_N3.4D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.022*** (0.004) [0.014, 0.031]	0.022*** (0.004) [0.014, 0.031]	0.022*** (0.004) [0.014, 0.031]	0.022*** (0.004) [0.014, 0.031]	0.022*** (0.004) [0.014, 0.031]	0.022*** (0.004) [0.014, 0.031]
Mother Education	0.008 (0.005) [-0.002, 0.018]	0.008 (0.005) [-0.002, 0.018]	0.008 (0.005) [-0.002, 0.018]	0.008 (0.005) [-0.002, 0.018]	0.008 (0.005) [-0.002, 0.018]	0.008 (0.005) [-0.002, 0.018]
Urban Location	0.003 (0.021) [-0.038, 0.044]	0.002 (0.021) [-0.039, 0.044]	0.003 (0.021) [-0.039, 0.044]	0.002 (0.021) [-0.039, 0.044]	0.002 (0.021) [-0.039, 0.043]	0.002 (0.021) [-0.039, 0.043]
Cognitive Ability (Z-Score)	0.084*** (0.013) [0.059, 0.109]	0.084*** (0.013) [0.059, 0.109]	0.084*** (0.013) [0.059, 0.109]	0.084*** (0.013) [0.059, 0.109]	0.084*** (0.013) [0.059, 0.109]	0.084*** (0.013) [0.059, 0.109]
Locus of Control	0.048* (0.022) [0.004, 0.091]	0.049* (0.022) [0.005, 0.092]	0.049* (0.022) [0.005, 0.092]	0.047* (0.022) [0.004, 0.091]	0.048* (0.022) [0.005, 0.092]	0.049* (0.022) [0.005, 0.092]
Self Concept	-0.016 (0.019) [-0.054, 0.021]	-0.017 (0.019) [-0.054, 0.021]	-0.017 (0.019) [-0.055, 0.020]	-0.017 (0.019) [-0.054, 0.021]	-0.016 (0.019) [-0.054, 0.021]	-0.017 (0.019) [-0.054, 0.020]
Non-Cognitive Ability (EXTERNAL)	0.217*** (0.050) [0.118, 0.316]	0.217*** (0.050) [0.118, 0.315]	0.215*** (0.050) [0.117, 0.314]	0.218*** (0.050) [0.119, 0.317]	0.217*** (0.050) [0.118, 0.316]	0.216*** (0.050) [0.117, 0.315]
Black - not Hispanic	-0.034 (0.045) [-0.121, 0.054]	-0.026 (0.043) [-0.109, 0.058]	-0.024 (0.043) [-0.107, 0.060]	-0.033 (0.045) [-0.121, 0.054]	-0.027 (0.043) [-0.111, 0.057]	-0.026 (0.043) [-0.110, 0.058]
American Indian or Alaska Native	-0.110 (0.137) [-0.378, 0.159]	-0.109 (0.137) [-0.378, 0.159]	-0.119 (0.140) [-0.394, 0.156]	-0.110 (0.137) [-0.379, 0.159]	-0.110 (0.137) [-0.378, 0.159]	-0.117 (0.140) [-0.392, 0.157]
Asian or Pacific Islander	0.066* (0.031) [0.005, 0.127]	0.066* (0.031) [0.005, 0.126]	0.066* (0.031) [0.006, 0.127]	0.066* (0.031) [0.005, 0.127]	0.066* (0.031) [0.005, 0.127]	0.066* (0.031) [0.006, 0.127]
Hispanic or Latino	-0.041 (0.041) [-0.121, 0.039]	-0.039 (0.041) [-0.119, 0.041]	-0.040 (0.041) [-0.120, 0.040]	-0.041 (0.041) [-0.121, 0.039]	-0.039 (0.041) [-0.119, 0.041]	-0.039 (0.041) [-0.119, 0.041]
Constant	-0.616** (0.208) [-1.024, -0.208]	-0.616** (0.208) [-1.024, -0.208]	-0.612** (0.208) [-1.020, -0.204]	-0.622** (0.208) [-1.030, -0.214]	-0.616** (0.208) [-1.024, -0.207]	-0.612** (0.208) [-1.020, -0.204]
Observations	1,880	1,880	1,880	1,880	1,880	1,880
Adjusted R-squared	0.141	0.141	0.141	0.140	0.140	0.140



**TABLE RBFO\_N3.4D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2000; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 1994**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.223 (0.138)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.281 (0.167)				
Incremental Effect of College Athletics for Single-Parent Household			0.179* (0.079)			
Incremental Effect of College BB Athletics for Blacks				0.534*** (0.051)		
Incremental Effect of College BB Athletics for Income Below Poverty Line					0.571*** (0.062)	
Incremental Effect of College BB Athletics for Single-Parent Household						0.566*** (0.061)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: NELS.

**TABLE RBFO\_N4.1A: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.117*** (0.022) [0.073 , 0.160]	
High School Sophomore BB/FB Varsity Athlete			0.114*** (0.031) [0.054 , 0.174]
High School Sophomore Non BB/FB Varsity Athlete			0.117*** (0.024) [0.071 , 0.164]
Single-Parent Household	-0.052 (0.027) [-0.106 , 0.002]	-0.047 (0.027) [-0.101 , 0.006]	-0.047 (0.027) [-0.101 , 0.006]
Family Income (\$10K)	0.013** (0.004) [0.005 , 0.021]	0.012** (0.004) [0.004 , 0.020]	0.012** (0.004) [0.004 , 0.020]
Family Income Below Poverty Line	-0.088* (0.036) [-0.159 , -0.018]	-0.084* (0.036) [-0.154 , -0.014]	-0.084* (0.036) [-0.154 , -0.014]
Number of Siblings	-0.003 (0.008) [-0.019 , 0.012]	-0.003 (0.008) [-0.018 , 0.013]	-0.003 (0.008) [-0.018 , 0.013]
Father Education	0.004 (0.005) [-0.007 , 0.014]	0.002 (0.005) [-0.008 , 0.012]	0.002 (0.005) [-0.009 , 0.012]
Mother Education	0.007 (0.006) [-0.004 , 0.019]	0.006 (0.006) [-0.006 , 0.018]	0.006 (0.006) [-0.006 , 0.018]
Urban Location	-0.014 (0.025) [-0.064 , 0.036]	-0.008 (0.025) [-0.057 , 0.041]	-0.008 (0.025) [-0.058 , 0.041]
Cognitive Ability (Z-Score)	0.004 (0.013) [-0.022 , 0.030]	0.004 (0.013) [-0.022 , 0.029]	0.004 (0.013) [-0.022 , 0.029]
Locus of Control	0.039 (0.022) [-0.005 , 0.083]	0.038 (0.022) [-0.005 , 0.081]	0.038 (0.022) [-0.005 , 0.081]

**TABLE RBFO\_N4.1A: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)
Self Concept	0.052* (0.020) [0.012 , 0.091]	0.045* (0.020) [0.006 , 0.085]	0.045* (0.020) [0.005 , 0.085]
Non-Cognitive Ability (EXTERNAL)	0.009 (0.038) [-0.066 , 0.084]	-0.001 (0.038) [-0.075 , 0.073]	-0.001 (0.038) [-0.075 , 0.073]
Black - not Hispanic	-0.104* (0.041) [-0.185 , -0.023]	-0.111** (0.041) [-0.191 , -0.030]	-0.110** (0.041) [-0.191 , -0.030]
American Indian or Alaska Native	-0.372* (0.146) [-0.658 , -0.085]	-0.361* (0.148) [-0.651 , -0.071]	-0.361* (0.148) [-0.651 , -0.071]
Asian or Pacific Islander	0.096 (0.064) [-0.030 , 0.222]	0.104 (0.064) [-0.022 , 0.229]	0.104 (0.064) [-0.022 , 0.229]
Hispanic or Latino	-0.038 (0.040) [-0.115 , 0.040]	-0.047 (0.039) [-0.125 , 0.030]	-0.047 (0.039) [-0.125 , 0.030]
Full Time Worker	0.755*** (0.048) [0.660 , 0.850]	0.747*** (0.048) [0.653 , 0.842]	0.747*** (0.048) [0.653 , 0.842]
Graduate in 1999 or Student in January 2000	-0.230*** (0.032) [-0.293 , -0.167]	-0.236*** (0.032) [-0.298 , -0.173]	-0.236*** (0.032) [-0.298 , -0.173]
Constant	9.348*** (0.182) [8.991 , 9.706]	9.369*** (0.181) [9.015 , 9.723]	9.370*** (0.181) [9.016 , 9.724]
Observations	3,240	3,240	3,240
Adjusted R-squared	0.200	0.206	0.206

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RBFO\_N4.1B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.110*** (0.023) [0.065, 0.155]	0.112*** (0.024) [0.065, 0.159]	0.107*** (0.025) [0.057, 0.156]			
HS Sophomore Athlete × Black	0.111 (0.086) [-0.058, 0.280]					
HS Sophomore Athlete × Income Below Poverty Line		0.043 (0.063) [-0.081, 0.167]				
HS Sophomore Athlete × Single-Parent Household			0.041 (0.054) [-0.064, 0.146]			
High School Sophomore BB/FB Varsity Athlete				0.108*** (0.032) [0.045, 0.171]	0.114*** (0.033) [0.049, 0.179]	0.090** (0.034) [0.024, 0.157]
High School Sophomore Non BB/FB Varsity Athlete				0.111*** (0.024) [0.063, 0.159]	0.111*** (0.025) [0.062, 0.161]	0.111*** (0.027) [0.059, 0.164]
HS Sophomore BB/FB Athlete × Black				0.088 (0.107) [-0.122, 0.298]		
HS Non BB/FB Varsity Athlete × Black				0.127 (0.092) [-0.054, 0.308]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					-0.005 (0.082) [-0.167, 0.156]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					0.065 (0.073) [-0.077, 0.208]	
HS Sophomore BB/FB Athlete × Single-Parent Household						0.092 (0.076) [-0.057, 0.242]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.023 (0.057) [-0.089, 0.135]
Single-Parent Household	-0.048 (0.027) [-0.102, 0.005]	-0.048 (0.027) [-0.101, 0.006]	-0.070 (0.043) [-0.154, 0.014]	-0.048 (0.027) [-0.102, 0.005]	-0.047 (0.027) [-0.101, 0.006]	-0.070 (0.043) [-0.154, 0.014]
Family Income (\$10K)	0.012** (0.004) [0.004, 0.021]	0.012** (0.004) [0.004, 0.020]	0.012** (0.004) [0.004, 0.020]	0.012** (0.004) [0.004, 0.021]	0.012** (0.004) [0.004, 0.021]	0.012** (0.004) [0.004, 0.021]
Family Income Below Poverty Line	-0.085* (0.036) [-0.154, -0.015]	-0.105* (0.047) [-0.198, -0.012]	-0.084* (0.036) [-0.154, -0.014]	-0.084* (0.036) [-0.154, -0.014]	-0.105* (0.047) [-0.198, -0.012]	-0.085* (0.036) [-0.154, -0.015]
Number of Siblings	-0.002 (0.008) [-0.018, 0.013]	-0.003 (0.008) [-0.018, 0.013]	-0.003 (0.008) [-0.018, 0.013]	-0.002 (0.008) [-0.018, 0.013]	-0.003 (0.008) [-0.018, 0.013]	-0.003 (0.008) [-0.018, 0.013]

**TABLE RBFO\_N4.1B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.002 (0.005) [-0.009, 0.012]	0.002 (0.005) [-0.008, 0.012]	0.002 (0.005) [-0.008, 0.012]	0.002 (0.005) [-0.009, 0.012]	0.002 (0.005) [-0.009, 0.012]	0.002 (0.005) [-0.009, 0.012]
Mother Education	0.006 (0.006) [-0.006, 0.017]	0.006 (0.006) [-0.006, 0.018]	0.006 (0.006) [-0.006, 0.018]	0.006 (0.006) [-0.006, 0.017]	0.006 (0.006) [-0.006, 0.018]	0.006 (0.006) [-0.006, 0.017]
Urban Location	-0.008 (0.025) [-0.058, 0.041]	-0.008 (0.025) [-0.057, 0.042]	-0.008 (0.025) [-0.057, 0.042]	-0.008 (0.025) [-0.058, 0.041]	-0.008 (0.025) [-0.058, 0.041]	-0.008 (0.025) [-0.057, 0.042]
Cognitive Ability (Z-Score)	0.004 (0.013) [-0.022, 0.029]	0.004 (0.013) [-0.022, 0.029]	0.004 (0.013) [-0.022, 0.030]	0.004 (0.013) [-0.022, 0.029]	0.004 (0.013) [-0.022, 0.029]	0.004 (0.013) [-0.022, 0.030]
Locus of Control	0.038 (0.022) [-0.005, 0.081]	0.038 (0.022) [-0.005, 0.081]	0.038 (0.022) [-0.005, 0.082]	0.038 (0.022) [-0.005, 0.081]	0.038 (0.022) [-0.006, 0.081]	0.038 (0.022) [-0.005, 0.082]
Self Concept	0.046* (0.020) [0.006, 0.085]	0.045* (0.020) [0.006, 0.085]	0.045* (0.020) [0.005, 0.084]	0.046* (0.020) [0.006, 0.085]	0.046* (0.020) [0.006, 0.085]	0.045* (0.020) [0.005, 0.084]
Non-Cognitive Ability (EXTERNAL)	-0.001 (0.038) [-0.075, 0.073]	-0.001 (0.038) [-0.075, 0.073]	-0.002 (0.038) [-0.077, 0.073]	-0.001 (0.038) [-0.075, 0.073]	-0.000 (0.038) [-0.075, 0.074]	-0.002 (0.038) [-0.077, 0.072]
Black - not Hispanic	-0.179* (0.073) [-0.322, -0.035]	-0.112** (0.041) [-0.193, -0.032]	-0.112** (0.041) [-0.193, -0.032]	-0.179* (0.073) [-0.322, -0.036]	-0.110** (0.041) [-0.190, -0.030]	-0.112** (0.041) [-0.193, -0.032]
American Indian or Alaska Native	-0.362* (0.148) [-0.651, -0.072]	-0.363* (0.148) [-0.653, -0.073]	-0.360* (0.148) [-0.650, -0.069]	-0.362* (0.148) [-0.652, -0.072]	-0.359* (0.150) [-0.653, -0.065]	-0.357* (0.148) [-0.647, -0.067]
Asian or Pacific Islander	0.103 (0.064) [-0.022, 0.229]	0.104 (0.064) [-0.022, 0.230]	0.104 (0.064) [-0.021, 0.230]	0.103 (0.064) [-0.022, 0.229]	0.103 (0.064) [-0.022, 0.229]	0.104 (0.064) [-0.022, 0.229]
Hispanic or Latino	-0.047 (0.040) [-0.124, 0.031]	-0.047 (0.040) [-0.124, 0.031]	-0.048 (0.039) [-0.125, 0.030]	-0.047 (0.039) [-0.125, 0.030]	-0.047 (0.039) [-0.124, 0.031]	-0.048 (0.039) [-0.125, 0.029]
Full Time Worker	0.748*** (0.048) [0.653, 0.842]	0.747*** (0.048) [0.652, 0.842]	0.747*** (0.048) [0.652, 0.841]	0.748*** (0.048) [0.653, 0.842]	0.747*** (0.048) [0.652, 0.842]	0.747*** (0.048) [0.652, 0.841]
Graduate in 1999 or Student in January 2000	-0.236*** (0.032) [-0.298, -0.173]	-0.236*** (0.032) [-0.299, -0.173]	-0.237*** (0.032) [-0.300, -0.174]	-0.236*** (0.032) [-0.298, -0.173]	-0.236*** (0.032) [-0.299, -0.174]	-0.237*** (0.032) [-0.300, -0.174]
Constant	9.373*** (0.181) [9.018, 9.727]	9.371*** (0.181) [9.017, 9.725]	9.380*** (0.183) [9.021, 9.738]	9.375*** (0.181) [9.020, 9.730]	9.369*** (0.181) [9.015, 9.724]	9.383*** (0.183) [9.024, 9.742]
Observations	3,240	3,240	3,240	3,240	3,240	3,240
Adjusted R-squared	0.207	0.206	0.206	0.206	0.206	0.206

**TABLE RBFO\_N4.1B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.221** (0.083)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.155** (0.059)				
Incremental Effect of HS Athletics for Single-Parent Household			0.148** (0.047)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.196 (0.102)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.109 (0.075)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.183** (0.068)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RBFO\_N4.1C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.142*** (0.036) [0.071, 0.213]	0.098* (0.042) [0.015, 0.180]	0.146*** (0.040) [0.068, 0.224]			
College Varsity and High School BB/FB Varsity Athlete				0.100 (0.115) [-0.125, 0.326]	0.003 (0.147) [-0.286, 0.291]	0.052 (0.144) [-0.230, 0.335]
College Varsity Athlete Non BB/FB				0.148*** (0.037) [0.074, 0.221]	0.112** (0.042) [0.030, 0.195]	0.159*** (0.040) [0.080, 0.238]
College Varsity Athlete × Division 1		0.101 (0.077) [-0.051, 0.252]				
College Varsity Athlete × FBS			-0.017 (0.099) [-0.210, 0.177]			
College BB/FB Varsity Athlete × Division 1					0.259 (0.225) [-0.183, 0.701]	
College BB/FB Varsity Athlete × FBS						0.223 (0.158) [-0.087, 0.534]
College Varsity Athlete Non BB/FB × Division 1					0.078 (0.081) [-0.080, 0.237]	
College Varsity Athlete Non BB/FB × FBS						-0.054 (0.110) [-0.270, 0.162]
NCAA Division 1 School		0.047 (0.030) [-0.011, 0.106]			0.047 (0.030) [-0.011, 0.106]	
NCAA Division 1-A (FBS) School			0.023 (0.037) [-0.050, 0.095]			0.023 (0.037) [-0.049, 0.095]
Single-Parent Household	-0.051 (0.027) [-0.105, 0.003]	-0.051 (0.027) [-0.104, 0.003]	-0.050 (0.027) [-0.104, 0.003]	-0.051 (0.027) [-0.105, 0.003]	-0.051 (0.027) [-0.105, 0.003]	-0.050 (0.027) [-0.104, 0.003]
Family Income (\$10K)	0.013** (0.004) [0.005, 0.021]	0.012** (0.004) [0.004, 0.020]	0.013** (0.004) [0.005, 0.021]	0.013** (0.004) [0.005, 0.021]	0.012** (0.004) [0.004, 0.020]	0.013** (0.004) [0.005, 0.021]
Family Income Below Poverty Line	-0.084* (0.036) [-0.154, -0.014]	-0.084* (0.036) [-0.154, -0.014]	-0.084* (0.036) [-0.154, -0.014]	-0.084* (0.036) [-0.154, -0.014]	-0.085* (0.036) [-0.155, -0.015]	-0.085* (0.036) [-0.155, -0.015]
Number of Siblings	-0.004 (0.008) [-0.019, 0.012]	-0.004 (0.008) [-0.020, 0.012]	-0.004 (0.008) [-0.019, 0.012]	-0.004 (0.008) [-0.019, 0.012]	-0.004 (0.008) [-0.019, 0.012]	-0.003 (0.008) [-0.019, 0.012]
Father Education	0.003 (0.005) [-0.008, 0.014]	0.002 (0.005) [-0.008, 0.013]	0.003 (0.005) [-0.008, 0.013]	0.003 (0.005) [-0.007, 0.014]	0.002 (0.005) [-0.008, 0.013]	0.003 (0.005) [-0.008, 0.013]

**TABLE RBFO\_N4.1C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.006 (0.006) [-0.005, 0.018]	0.005 (0.006) [-0.006, 0.017]	0.006 (0.006) [-0.005, 0.018]	0.006 (0.006) [-0.005, 0.018]	0.005 (0.006) [-0.006, 0.017]	0.006 (0.006) [-0.006, 0.017]
Urban Location	-0.013 (0.025) [-0.063, 0.037]	-0.015 (0.026) [-0.065, 0.035]	-0.013 (0.026) [-0.063, 0.037]	-0.013 (0.025) [-0.062, 0.037]	-0.014 (0.026) [-0.064, 0.036]	-0.013 (0.026) [-0.063, 0.037]
Cognitive Ability (Z-Score)	0.003 (0.013) [-0.023, 0.028]	-0.001 (0.014) [-0.028, 0.025]	0.001 (0.013) [-0.025, 0.028]	0.003 (0.013) [-0.023, 0.028]	-0.001 (0.014) [-0.028, 0.025]	0.001 (0.013) [-0.025, 0.028]
Locus of Control	0.038 (0.022) [-0.006, 0.081]	0.036 (0.022) [-0.007, 0.080]	0.037 (0.022) [-0.006, 0.081]	0.038 (0.022) [-0.006, 0.081]	0.037 (0.022) [-0.006, 0.080]	0.038 (0.022) [-0.005, 0.081]
Self Concept	0.048* (0.020) [0.008, 0.087]	0.047* (0.020) [0.007, 0.086]	0.048* (0.020) [0.008, 0.087]	0.047* (0.020) [0.008, 0.087]	0.046* (0.020) [0.007, 0.086]	0.047* (0.020) [0.008, 0.087]
Non-Cognitive Ability (EXTERNAL)	0.005 (0.038) [-0.070, 0.080]	-0.000 (0.038) [-0.075, 0.075]	0.003 (0.038) [-0.072, 0.078]	0.004 (0.038) [-0.071, 0.079]	0.000 (0.038) [-0.075, 0.075]	0.003 (0.038) [-0.071, 0.078]
Black - not Hispanic	-0.110** (0.041) [-0.191, -0.029]	-0.116** (0.041) [-0.197, -0.034]	-0.111** (0.041) [-0.192, -0.030]	-0.110** (0.041) [-0.191, -0.029]	-0.115** (0.042) [-0.196, -0.033]	-0.110** (0.041) [-0.192, -0.029]
American Indian or Alaska Native	-0.371* (0.145) [-0.656, -0.086]	-0.376** (0.145) [-0.661, -0.090]	-0.371* (0.145) [-0.657, -0.086]	-0.371* (0.145) [-0.657, -0.086]	-0.375* (0.145) [-0.660, -0.090]	-0.370* (0.146) [-0.656, -0.084]
Asian or Pacific Islander	0.102 (0.065) [-0.024, 0.229]	0.099 (0.065) [-0.028, 0.226]	0.102 (0.065) [-0.024, 0.229]	0.102 (0.065) [-0.024, 0.229]	0.099 (0.065) [-0.029, 0.226]	0.103 (0.065) [-0.024, 0.230]
Hispanic or Latino	-0.036 (0.039) [-0.113, 0.041]	-0.039 (0.039) [-0.116, 0.038]	-0.036 (0.039) [-0.114, 0.041]	-0.037 (0.039) [-0.114, 0.041]	-0.039 (0.039) [-0.117, 0.038]	-0.037 (0.039) [-0.114, 0.040]
Full Time Worker	0.751*** (0.048) [0.656, 0.846]	0.752*** (0.048) [0.658, 0.847]	0.752*** (0.048) [0.658, 0.846]	0.751*** (0.048) [0.656, 0.846]	0.752*** (0.048) [0.658, 0.847]	0.751*** (0.048) [0.657, 0.846]
Graduate in 1999 or Student in January 2000	-0.237*** (0.032) [-0.299, -0.174]	-0.236*** (0.032) [-0.299, -0.174]	-0.237*** (0.032) [-0.300, -0.174]	-0.236*** (0.032) [-0.299, -0.173]	-0.236*** (0.032) [-0.299, -0.173]	-0.236*** (0.032) [-0.299, -0.173]
Constant	9.385*** (0.182) [9.028, 9.743]	9.420*** (0.183) [9.062, 9.778]	9.393*** (0.183) [9.034, 9.751]	9.386*** (0.182) [9.029, 9.744]	9.421*** (0.183) [9.063, 9.779]	9.395*** (0.183) [9.037, 9.754]
Observations	3,240	3,240	3,240	3,240	3,240	3,240
Adjusted R-squared	0.203	0.204	0.203	0.203	0.204	0.202



**TABLE RBFO\_N4.1C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.199** (0.065)				
Incremental Effect of College Athletics for FBS Students			0.129 (0.090)			
Incremental Effect of College BB/FB Athletics for Division I Students					0.261 (0.171)	
Incremental Effect of College BB/FB Athletics for FBS Students						0.276*** (0.063)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RBFO\_N4.1D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.136*** (0.038) [0.061, 0.212]	0.132*** (0.037) [0.060, 0.203]	0.148*** (0.039) [0.072, 0.223]			
College Varsity and High School BB/FB Varsity Athlete				0.063 (0.127) [-0.187, 0.312]	0.100 (0.115) [-0.126, 0.326]	0.142 (0.078) [-0.012, 0.296]
College Varsity Athlete Non BB/FB				0.146*** (0.040) [0.068, 0.224]	0.136*** (0.038) [0.062, 0.210]	0.148*** (0.042) [0.066, 0.231]
College Varsity Athlete × Black	0.072 (0.103) [-0.130, 0.273]					
College Varsity Athlete × Income Below Poverty Line		0.437* (0.211) [0.023, 0.852]				
College Varsity Athlete × Single-Parent Household			-0.030 (0.103) [-0.231, 0.172]			
College BB/FB Varsity Athlete × Black				0.315 (0.217) [-0.110, 0.740]		
College BB/FB Varsity Athlete × Single-Parent Household						-0.173 (0.414) [-0.984, 0.639]
College Varsity Athlete Non BB/FB × Black				0.026 (0.111) [-0.192, 0.243]		
College Varsity Athlete Non BB/FB × Income Below Poverty Line					0.433* (0.211) [0.018, 0.847]	
College Varsity Athlete Non BB/FB × Single-Parent Household						-0.003 (0.093) [-0.184, 0.179]
Single-Parent Household	-0.051 (0.027) [-0.105, 0.003]	-0.052 (0.027) [-0.106, 0.002]	-0.049 (0.028) [-0.104, 0.007]	-0.051 (0.027) [-0.104, 0.003]	-0.052 (0.027) [-0.106, 0.002]	-0.049 (0.028) [-0.104, 0.007]
Family Income (\$10K)	0.013** (0.004) [0.005, 0.021]	0.013** (0.004) [0.005, 0.021]	0.013** (0.004) [0.005, 0.021]	0.013** (0.004) [0.005, 0.021]	0.013** (0.004) [0.005, 0.021]	0.013** (0.004) [0.005, 0.021]
Family Income Below Poverty Line	-0.083* (0.036) [-0.153, -0.013]	-0.092* (0.036) [-0.163, -0.022]	-0.084* (0.036) [-0.154, -0.014]	-0.083* (0.036) [-0.153, -0.013]	-0.093* (0.036) [-0.163, -0.022]	-0.085* (0.036) [-0.155, -0.014]
Number of Siblings	-0.004 (0.008) [-0.019, 0.012]	-0.003 (0.008) [-0.019, 0.013]	-0.004 (0.008) [-0.019, 0.012]	-0.004 (0.008) [-0.019, 0.012]	-0.003 (0.008) [-0.019, 0.013]	-0.004 (0.008) [-0.019, 0.012]
Father Education	0.003 (0.005) [-0.007, 0.014]	0.003 (0.005) [-0.008, 0.013]	0.003 (0.005) [-0.008, 0.013]	0.003 (0.005) [-0.007, 0.014]	0.003 (0.005) [-0.008, 0.013]	0.003 (0.005) [-0.008, 0.014]

**TABLE RBFO\_N4.1D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.006 (0.006) [-0.005, 0.018]	0.006 (0.006) [-0.005, 0.018]	0.006 (0.006) [-0.005, 0.018]	0.006 (0.006) [-0.005, 0.018]	0.006 (0.006) [-0.005, 0.018]	0.006 (0.006) [-0.005, 0.018]
Urban Location	-0.013 (0.025) [-0.063, 0.037]	-0.013 (0.025) [-0.063, 0.037]	-0.013 (0.025) [-0.062, 0.037]	-0.013 (0.025) [-0.063, 0.037]	-0.013 (0.025) [-0.062, 0.037]	-0.012 (0.025) [-0.062, 0.037]
Cognitive Ability (Z-Score)	0.003 (0.013) [-0.023, 0.029]	0.003 (0.013) [-0.023, 0.029]	0.003 (0.013) [-0.023, 0.028]	0.003 (0.013) [-0.023, 0.028]	0.003 (0.013) [-0.023, 0.029]	0.003 (0.013) [-0.023, 0.028]
Locus of Control	0.037 (0.022) [-0.006, 0.081]	0.036 (0.022) [-0.007, 0.080]	0.038 (0.022) [-0.006, 0.081]	0.038 (0.022) [-0.006, 0.081]	0.036 (0.022) [-0.007, 0.080]	0.038 (0.022) [-0.005, 0.082]
Self Concept	0.048* (0.020) [0.008, 0.087]	0.048* (0.020) [0.009, 0.088]	0.047* (0.020) [0.008, 0.087]	0.047* (0.020) [0.008, 0.087]	0.048* (0.020) [0.008, 0.088]	0.047* (0.020) [0.008, 0.087]
Non-Cognitive Ability (EXTERNAL)	0.004 (0.038) [-0.071, 0.080]	0.004 (0.038) [-0.071, 0.079]	0.005 (0.038) [-0.070, 0.080]	0.005 (0.038) [-0.070, 0.080]	0.004 (0.038) [-0.071, 0.079]	0.005 (0.038) [-0.070, 0.080]
Black - not Hispanic	-0.119** (0.045) [-0.206, -0.031]	-0.112** (0.041) [-0.194, -0.031]	-0.110** (0.041) [-0.191, -0.029]	-0.119** (0.045) [-0.206, -0.031]	-0.112** (0.041) [-0.193, -0.031]	-0.111** (0.041) [-0.192, -0.029]
American Indian or Alaska Native	-0.372* (0.145) [-0.657, -0.086]	-0.369* (0.145) [-0.654, -0.084]	-0.372* (0.145) [-0.657, -0.086]	-0.372* (0.145) [-0.657, -0.087]	-0.369* (0.145) [-0.654, -0.084]	-0.372* (0.145) [-0.657, -0.086]
Asian or Pacific Islander	0.102 (0.065) [-0.024, 0.229]	0.103 (0.065) [-0.024, 0.229]	0.103 (0.065) [-0.024, 0.229]	0.102 (0.065) [-0.025, 0.229]	0.103 (0.065) [-0.024, 0.229]	0.102 (0.065) [-0.025, 0.229]
Hispanic or Latino	-0.036 (0.039) [-0.114, 0.041]	-0.038 (0.039) [-0.115, 0.040]	-0.036 (0.039) [-0.113, 0.041]	-0.037 (0.039) [-0.114, 0.040]	-0.038 (0.039) [-0.115, 0.039]	-0.037 (0.039) [-0.114, 0.040]
Full Time Worker	0.751*** (0.048) [0.656, 0.846]	0.751*** (0.048) [0.657, 0.846]	0.751*** (0.048) [0.656, 0.846]	0.751*** (0.048) [0.656, 0.845]	0.751*** (0.048) [0.657, 0.846]	0.751*** (0.048) [0.656, 0.845]
Graduate in 1999 or Student in January 2000	-0.237*** (0.032) [-0.299, -0.174]	-0.237*** (0.032) [-0.299, -0.174]	-0.236*** (0.032) [-0.299, -0.174]	-0.236*** (0.032) [-0.299, -0.174]	-0.236*** (0.032) [-0.299, -0.174]	-0.236*** (0.032) [-0.299, -0.173]
Constant	9.386*** (0.182) [9.028, 9.743]	9.388*** (0.182) [9.031, 9.746]	9.385*** (0.182) [9.027, 9.742]	9.385*** (0.182) [9.027, 9.742]	9.389*** (0.182) [9.032, 9.747]	9.385*** (0.182) [9.028, 9.743]
Observations	3,240	3,240	3,240	3,240	3,240	3,240
Adjusted R-squared	0.203	0.203	0.203	0.202	0.203	0.202

**TABLE RBFO\_N4.1D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.208*					
	(0.096)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.569**				
		(0.208)				
Incremental Effect of College Athletics for Single-Parent Household			0.118			
			(0.096)			
Incremental Effect of College BB/FB Athletics for Blacks				0.378*		
				(0.175)		
Incremental Effect of College BB/FB Athletics for Income Below Poverty Line					0.100	
					(0.115)	
Incremental Effect of College BB/FB Athletics for Single-Parent Household						-0.030
						(0.406)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RBFO\_N4.2A: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.080** (0.024) [0.032 , 0.128]	
High School Sophomore BB Varsity Athlete			0.012 (0.083) [-0.151 , 0.175]
High School Sophomore Non BB Varsity Athlete			0.085*** (0.025) [0.036 , 0.134]
Single-Parent Household	-0.062* (0.029) [-0.118 , -0.006]	-0.060* (0.029) [-0.116 , -0.004]	-0.060* (0.029) [-0.116 , -0.003]
Family Income (\$10K)	0.007 (0.004) [-0.001 , 0.015]	0.006 (0.004) [-0.002 , 0.014]	0.006 (0.004) [-0.002 , 0.014]
Family Income Below Poverty Line	-0.125** (0.044) [-0.212 , -0.039]	-0.122** (0.044) [-0.209 , -0.036]	-0.121** (0.044) [-0.208 , -0.035]
Number of Siblings	-0.007 (0.009) [-0.025 , 0.011]	-0.007 (0.009) [-0.026 , 0.011]	-0.007 (0.009) [-0.025 , 0.011]
Father Education	0.016** (0.006) [0.004 , 0.029]	0.016** (0.006) [0.004 , 0.028]	0.016* (0.006) [0.004 , 0.028]
Mother Education	0.002 (0.007) [-0.011 , 0.015]	-0.000 (0.007) [-0.013 , 0.013]	-0.000 (0.007) [-0.013 , 0.013]
Urban Location	0.033 (0.027) [-0.019 , 0.086]	0.037 (0.027) [-0.016 , 0.089]	0.035 (0.027) [-0.017 , 0.088]
Cognitive Ability (Z-Score)	0.076*** (0.016) [0.046 , 0.107]	0.075*** (0.016) [0.045 , 0.106]	0.075*** (0.016) [0.044 , 0.106]
Locus of Control	0.064* (0.027) [0.011 , 0.116]	0.061* (0.027) [0.009 , 0.113]	0.061* (0.027) [0.009 , 0.114]

**TABLE RBFO\_N4.2A: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)
Self Concept	0.015 (0.022) [-0.028 , 0.058]	0.011 (0.022) [-0.032 , 0.053]	0.011 (0.022) [-0.032 , 0.054]
Non-Cognitive Ability (EXTERNAL)	0.119* (0.055) [0.010 , 0.228]	0.111* (0.056) [0.002 , 0.220]	0.110* (0.056) [0.001 , 0.220]
Black - not Hispanic	-0.028 (0.049) [-0.124 , 0.069]	-0.018 (0.049) [-0.115 , 0.079]	-0.016 (0.049) [-0.113 , 0.081]
American Indian or Alaska Native	-0.350* (0.170) [-0.684 , -0.016]	-0.356* (0.169) [-0.688 , -0.025]	-0.354* (0.170) [-0.687 , -0.022]
Asian or Pacific Islander	0.119* (0.055) [0.010 , 0.227]	0.128* (0.055) [0.020 , 0.235]	0.127* (0.055) [0.019 , 0.235]
Hispanic or Latino	0.100** (0.035) [0.032 , 0.168]	0.106** (0.035) [0.037 , 0.174]	0.106** (0.035) [0.037 , 0.175]
Full Time Worker	0.959*** (0.040) [0.881 , 1.037]	0.953*** (0.040) [0.875 , 1.031]	0.953*** (0.040) [0.875 , 1.031]
Graduate in 1999 or Student in January 2000	-0.077** (0.029) [-0.134 , -0.021]	-0.082** (0.029) [-0.138 , -0.025]	-0.083** (0.029) [-0.139 , -0.026]
Constant	8.359*** (0.237) [7.895 , 8.824]	8.392*** (0.238) [7.926 , 8.858]	8.395*** (0.238) [7.928 , 8.862]
Observations	3,380	3,380	3,380
Adjusted R-squared	0.295	0.297	0.297

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RBFO\_N4.2B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.080** (0.025) [0.031, 0.130]	0.082** (0.026) [0.032, 0.132]	0.099*** (0.028) [0.045, 0.153]			
HS Sophomore Athlete × Black	-0.002 (0.099) [-0.197, 0.192]					
HS Sophomore Athlete × Income Below Poverty Line		-0.018 (0.085) [-0.185, 0.148]				
HS Sophomore Athlete × Single-Parent Household			-0.074 (0.058) [-0.188, 0.040]			
High School Sophomore BB Varsity Athlete				-0.006 (0.088) [-0.179, 0.166]	0.003 (0.092) [-0.178, 0.184]	-0.076 (0.096) [-0.264, 0.112]
High School Sophomore Non BB Varsity Athlete				0.086*** (0.026) [0.035, 0.136]	0.087*** (0.026) [0.036, 0.138]	0.110*** (0.028) [0.054, 0.165]
HS Sophomore BB Athlete × Black				0.125 (0.259) [-0.383, 0.632]		
HS Non BB Varsity Athlete × Black				-0.015 (0.102) [-0.215, 0.185]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.055 (0.208) [-0.353, 0.463]	
HS Non BB Varsity Athlete × Income Below Poverty Line					-0.022 (0.089) [-0.197, 0.153]	
HS Sophomore BB Athlete × Single-Parent Household						0.312 (0.184) [-0.048, 0.673]
HS Non BB Varsity Athlete × Single-Parent Household						-0.102 (0.059) [-0.218, 0.014]
Single-Parent Household	-0.060* (0.029) [-0.116, -0.004]	-0.059* (0.029) [-0.115, -0.003]	-0.028 (0.037) [-0.101, 0.045]	-0.060* (0.029) [-0.116, -0.004]	-0.059* (0.029) [-0.115, -0.003]	-0.028 (0.037) [-0.101, 0.044]
Family Income (\$10K)	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.013]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.013]
Family Income Below Poverty Line	-0.122** (0.044) [-0.209, -0.036]	-0.117* (0.052) [-0.218, -0.015]	-0.124** (0.044) [-0.210, -0.037]	-0.123** (0.044) [-0.210, -0.036]	-0.118* (0.052) [-0.219, -0.016]	-0.123** (0.044) [-0.209, -0.037]
Number of Siblings	-0.007 (0.009) [-0.026, 0.011]	-0.007 (0.009) [-0.026, 0.011]	-0.008 (0.009) [-0.026, 0.011]	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.011]

**TABLE RBFO\_N4.2B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.016** (0.006) [0.004, 0.028]	0.016** (0.006) [0.004, 0.028]	0.016** (0.006) [0.004, 0.028]	0.016* (0.006) [0.004, 0.028]	0.016* (0.006) [0.004, 0.028]	0.016** (0.006) [0.004, 0.028]
Mother Education	-0.000 (0.007) [-0.013, 0.013]	-0.000 (0.007) [-0.013, 0.013]	-0.000 (0.007) [-0.013, 0.013]	-0.000 (0.007) [-0.013, 0.013]	-0.000 (0.007) [-0.013, 0.013]	-0.001 (0.007) [-0.014, 0.013]
Urban Location	0.037 (0.027) [-0.016, 0.089]	0.036 (0.027) [-0.016, 0.089]	0.036 (0.027) [-0.017, 0.088]	0.036 (0.027) [-0.017, 0.088]	0.035 (0.027) [-0.017, 0.088]	0.033 (0.027) [-0.020, 0.086]
Cognitive Ability (Z-Score)	0.075*** (0.016) [0.045, 0.106]	0.075*** (0.016) [0.045, 0.106]	0.075*** (0.016) [0.045, 0.106]	0.075*** (0.016) [0.044, 0.106]	0.075*** (0.016) [0.044, 0.106]	0.075*** (0.016) [0.045, 0.106]
Locus of Control	0.061* (0.027) [0.009, 0.113]	0.061* (0.027) [0.009, 0.114]	0.061* (0.027) [0.009, 0.114]	0.062* (0.027) [0.010, 0.114]	0.062* (0.027) [0.009, 0.114]	0.064* (0.027) [0.012, 0.116]
Self Concept	0.011 (0.022) [-0.032, 0.053]	0.010 (0.022) [-0.032, 0.053]	0.010 (0.022) [-0.033, 0.053]	0.010 (0.022) [-0.032, 0.053]	0.010 (0.022) [-0.032, 0.053]	0.009 (0.022) [-0.034, 0.052]
Non-Cognitive Ability (EXTERNAL)	0.111* (0.056) [0.001, 0.220]	0.111* (0.056) [0.002, 0.220]	0.110* (0.056) [0.001, 0.220]	0.110* (0.056) [0.001, 0.220]	0.110* (0.056) [0.001, 0.220]	0.112* (0.056) [0.003, 0.221]
Black - not Hispanic	-0.018 (0.061) [-0.137, 0.102]	-0.018 (0.049) [-0.115, 0.079]	-0.016 (0.049) [-0.112, 0.081]	-0.017 (0.061) [-0.137, 0.102]	-0.017 (0.049) [-0.113, 0.080]	-0.017 (0.049) [-0.114, 0.079]
American Indian or Alaska Native	-0.356* (0.169) [-0.688, -0.025]	-0.357* (0.169) [-0.689, -0.025]	-0.356* (0.169) [-0.688, -0.025]	-0.354* (0.170) [-0.687, -0.020]	-0.354* (0.170) [-0.687, -0.021]	-0.374* (0.168) [-0.704, -0.044]
Asian or Pacific Islander	0.128* (0.055) [0.020, 0.235]	0.128* (0.055) [0.020, 0.236]	0.131* (0.055) [0.023, 0.239]	0.127* (0.055) [0.019, 0.235]	0.128* (0.055) [0.020, 0.236]	0.128* (0.055) [0.020, 0.236]
Hispanic or Latino	0.106** (0.035) [0.037, 0.174]	0.106** (0.035) [0.037, 0.174]	0.108** (0.035) [0.039, 0.176]	0.106** (0.035) [0.038, 0.175]	0.106** (0.035) [0.038, 0.175]	0.111** (0.035) [0.043, 0.180]
Full Time Worker	0.953*** (0.040) [0.875, 1.031]	0.953*** (0.040) [0.875, 1.031]	0.954*** (0.040) [0.876, 1.031]	0.953*** (0.040) [0.875, 1.031]	0.953*** (0.040) [0.876, 1.031]	0.952*** (0.040) [0.875, 1.030]
Graduate in 1999 or Student in January 2000	-0.082** (0.029) [-0.138, -0.025]	-0.081** (0.029) [-0.138, -0.025]	-0.082** (0.029) [-0.138, -0.025]	-0.082** (0.029) [-0.139, -0.026]	-0.082** (0.029) [-0.139, -0.026]	-0.083** (0.029) [-0.139, -0.027]
Constant	8.392*** (0.238) [7.926, 8.859]	8.392*** (0.238) [7.926, 8.858]	8.388*** (0.237) [7.922, 8.853]	8.396*** (0.238) [7.929, 8.863]	8.395*** (0.238) [7.928, 8.862]	8.387*** (0.237) [7.922, 8.852]
Observations	3,380	3,380	3,380	3,380	3,380	3,380
Adjusted R-squared	0.297	0.297	0.297	0.297	0.296	0.298



**TABLE RBFO\_N4.2B: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.078 (0.096)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.064 (0.081)				
Incremental Effect of HS Athletics for Single-Parent Household			0.025 (0.051)			
Incremental Effect of HS BB Athletics for Blacks				0.118 (0.243)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.058 (0.186)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.236 (0.156)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.  
\*\*\* p<0.001, \*\* p<0.01, \* p<0.05  
Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.  
Respondents without a wage are excluded.  
Source: NELS.

**TABLE RBFO\_N4.2C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.083 (0.045) [-0.006, 0.172]	0.119* (0.060) [0.001, 0.236]	0.086 (0.050) [-0.012, 0.185]			
College Varsity and High School BB Varsity Athlete				0.066 (0.172) [-0.271, 0.403]	-0.001 (0.188) [-0.370, 0.368]	-0.028 (0.183) [-0.388, 0.331]
College Varsity Athlete Non BB				0.084 (0.046) [-0.007, 0.175]	0.124* (0.062) [0.003, 0.244]	0.090 (0.051) [-0.011, 0.191]
College Varsity Athlete × Division 1		-0.093 (0.090) [-0.268, 0.083]				
College Varsity Athlete × FBS			-0.004 (0.116) [-0.231, 0.223]			
College BB Varsity Athlete × Division 1					0.377 (0.197) [-0.010, 0.763]	
College BB Varsity Athlete × FBS						0.461* (0.194) [0.080, 0.841]
College Varsity Athlete Non BB × Division 1					-0.104 (0.091) [-0.283, 0.075]	
College Varsity Athlete Non BB × FBS						-0.021 (0.119) [-0.254, 0.212]
NCAA Division 1 School		0.126*** (0.030) [0.068, 0.184]			0.126*** (0.030) [0.068, 0.184]	
NCAA Division 1-A (FBS) School			0.043 (0.037) [-0.029, 0.116]			0.043 (0.037) [-0.029, 0.116]
Single-Parent Household	-0.061* (0.029) [-0.117, -0.005]	-0.060* (0.028) [-0.116, -0.004]	-0.061* (0.029) [-0.117, -0.005]	-0.061* (0.029) [-0.117, -0.005]	-0.060* (0.028) [-0.116, -0.005]	-0.061* (0.029) [-0.117, -0.005]
Family Income (\$10K)	0.007 (0.004) [-0.001, 0.014]	0.006 (0.004) [-0.002, 0.013]	0.006 (0.004) [-0.001, 0.014]	0.007 (0.004) [-0.001, 0.014]	0.006 (0.004) [-0.002, 0.013]	0.006 (0.004) [-0.001, 0.014]
Family Income Below Poverty Line	-0.126** (0.044) [-0.213, -0.040]	-0.128** (0.044) [-0.214, -0.041]	-0.127** (0.044) [-0.213, -0.040]	-0.126** (0.044) [-0.213, -0.040]	-0.129** (0.044) [-0.215, -0.042]	-0.128** (0.044) [-0.214, -0.041]
Number of Siblings	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.012]	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.011]	-0.006 (0.009) [-0.025, 0.012]	-0.007 (0.009) [-0.025, 0.011]
Father Education	0.016** (0.006) [0.004, 0.028]	0.014* (0.006) [0.002, 0.026]	0.016* (0.006) [0.003, 0.028]	0.016** (0.006) [0.004, 0.028]	0.014* (0.006) [0.002, 0.026]	0.016* (0.006) [0.003, 0.028]

**TABLE RBFO\_N4.2C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.002 (0.007) [-0.012, 0.015]	-0.000 (0.007) [-0.013, 0.013]	0.001 (0.007) [-0.012, 0.014]	0.002 (0.007) [-0.012, 0.015]	-0.000 (0.007) [-0.013, 0.013]	0.001 (0.007) [-0.012, 0.014]
Urban Location	0.034 (0.027) [-0.019, 0.086]	0.027 (0.027) [-0.026, 0.079]	0.033 (0.027) [-0.020, 0.085]	0.034 (0.027) [-0.019, 0.086]	0.026 (0.027) [-0.026, 0.079]	0.032 (0.027) [-0.020, 0.085]
Cognitive Ability (Z-Score)	0.076*** (0.016) [0.045, 0.106]	0.062*** (0.016) [0.031, 0.094]	0.073*** (0.016) [0.042, 0.104]	0.076*** (0.016) [0.045, 0.106]	0.062*** (0.016) [0.031, 0.094]	0.073*** (0.016) [0.042, 0.104]
Locus of Control	0.064* (0.027) [0.012, 0.116]	0.063* (0.027) [0.010, 0.115]	0.064* (0.027) [0.011, 0.116]	0.064* (0.027) [0.012, 0.116]	0.063* (0.027) [0.010, 0.115]	0.064* (0.027) [0.011, 0.116]
Self Concept	0.014 (0.022) [-0.029, 0.057]	0.011 (0.022) [-0.032, 0.054]	0.013 (0.022) [-0.030, 0.055]	0.014 (0.022) [-0.029, 0.057]	0.011 (0.022) [-0.032, 0.054]	0.013 (0.022) [-0.030, 0.056]
Non-Cognitive Ability (EXTERNAL)	0.117* (0.055) [0.009, 0.226]	0.108 (0.055) [-0.001, 0.216]	0.115* (0.055) [0.006, 0.224]	0.117* (0.055) [0.009, 0.226]	0.108 (0.055) [-0.001, 0.216]	0.115* (0.056) [0.006, 0.224]
Black - not Hispanic	-0.027 (0.049) [-0.124, 0.069]	-0.038 (0.049) [-0.135, 0.058]	-0.028 (0.049) [-0.124, 0.069]	-0.027 (0.049) [-0.124, 0.069]	-0.039 (0.049) [-0.136, 0.058]	-0.028 (0.049) [-0.125, 0.068]
American Indian or Alaska Native	-0.349* (0.170) [-0.682, -0.016]	-0.354* (0.171) [-0.689, -0.018]	-0.353* (0.170) [-0.686, -0.019]	-0.349* (0.170) [-0.682, -0.016]	-0.353* (0.171) [-0.689, -0.018]	-0.352* (0.170) [-0.686, -0.018]
Asian or Pacific Islander	0.122* (0.056) [0.014, 0.231]	0.103 (0.055) [-0.005, 0.211]	0.120* (0.056) [0.011, 0.229]	0.122* (0.056) [0.014, 0.231]	0.103 (0.055) [-0.005, 0.211]	0.120* (0.056) [0.011, 0.229]
Hispanic or Latino	0.101** (0.035) [0.033, 0.170]	0.098** (0.035) [0.029, 0.166]	0.101** (0.035) [0.033, 0.169]	0.101** (0.035) [0.033, 0.170]	0.098** (0.035) [0.029, 0.166]	0.101** (0.035) [0.033, 0.169]
Full Time Worker	0.959*** (0.040) [0.881, 1.036]	0.954*** (0.040) [0.876, 1.032]	0.958*** (0.040) [0.880, 1.036]	0.959*** (0.040) [0.881, 1.036]	0.954*** (0.040) [0.877, 1.032]	0.958*** (0.040) [0.880, 1.036]
Graduate in 1999 or Student in January 2000	-0.079** (0.029) [-0.136, -0.022]	-0.083** (0.029) [-0.140, -0.027]	-0.080** (0.029) [-0.136, -0.024]	-0.079** (0.029) [-0.136, -0.022]	-0.083** (0.029) [-0.139, -0.027]	-0.080** (0.029) [-0.136, -0.023]
Constant	8.373*** (0.237) [7.909, 8.838]	8.438*** (0.238) [7.972, 8.904]	8.390*** (0.238) [7.922, 8.857]	8.373*** (0.237) [7.909, 8.838]	8.439*** (0.238) [7.972, 8.905]	8.390*** (0.238) [7.923, 8.858]
Observations	3,380	3,380	3,380	3,380	3,380	3,380
Adjusted R-squared	0.295	0.298	0.295	0.295	0.298	0.295

**TABLE RBFO\_N4.2C: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.026 (0.067)				
Incremental Effect of College Athletics for FBS Students			0.082 (0.104)			
Incremental Effect of College BB Athletics for Division I Students					0.376*** (0.062)	
Incremental Effect of College BB Athletics for FBS Students						0.432*** (0.066)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: NELS.

**TABLE RBFO\_N4.2D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.075 (0.048) [-0.018, 0.168]	0.070 (0.047) [-0.022, 0.161]	0.080 (0.049) [-0.017, 0.177]			
College Varsity and High School BB Varsity Athlete				-0.013 (0.240) [-0.483, 0.457]	-0.036 (0.181) [-0.391, 0.320]	-0.035 (0.182) [-0.391, 0.321]
College Varsity Athlete Non BB				0.077 (0.048) [-0.018, 0.171]	0.073 (0.048) [-0.021, 0.166]	0.083 (0.051) [-0.016, 0.182]
College Varsity Athlete × Black	0.139 (0.122) [-0.101, 0.378]					
College Varsity Athlete × Income Below Poverty Line		0.332** (0.125) [0.087, 0.576]				
College Varsity Athlete × Single-Parent Household			0.024 (0.119) [-0.210, 0.257]			
College BB Varsity Athlete × Black				0.202 (0.318) [-0.421, 0.825]		
College BB Varsity Athlete × Income Below Poverty Line					0.514** (0.189) [0.143, 0.884]	
College BB Varsity Athlete × Single-Parent Household						0.508** (0.189) [0.137, 0.879]
College Varsity Athlete Non BB × Black				0.144 (0.136) [-0.122, 0.411]		
College Varsity Athlete Non BB × Income Below Poverty Line					0.313* (0.143) [0.033, 0.593]	
College Varsity Athlete Non BB × Single-Parent Household						0.002 (0.123) [-0.238, 0.243]
Single-Parent Household	-0.060* (0.029) [-0.117, -0.004]	-0.061* (0.029) [-0.117, -0.005]	-0.061* (0.029) [-0.119, -0.004]	-0.061* (0.029) [-0.117, -0.004]	-0.061* (0.029) [-0.118, -0.005]	-0.061* (0.029) [-0.118, -0.004]
Family Income (\$10K)	0.007 (0.004) [-0.001, 0.014]	0.007 (0.004) [-0.001, 0.015]	0.007 (0.004) [-0.001, 0.014]	0.007 (0.004) [-0.001, 0.014]	0.007 (0.004) [-0.001, 0.015]	0.007 (0.004) [-0.001, 0.014]
Family Income Below Poverty Line	-0.127** (0.044) [-0.213, -0.040]	-0.131** (0.045) [-0.218, -0.044]	-0.126** (0.044) [-0.213, -0.040]	-0.127** (0.044) [-0.213, -0.040]	-0.131** (0.045) [-0.219, -0.044]	-0.127** (0.044) [-0.214, -0.041]
Number of Siblings	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.011]	-0.007 (0.009) [-0.025, 0.012]

**TABLE RBFO\_N4.2D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.016** (0.006) [0.004, 0.028]	0.016** (0.006) [0.004, 0.028]	0.016** (0.006) [0.004, 0.028]	0.016** (0.006) [0.004, 0.028]	0.016** (0.006) [0.004, 0.028]	0.016** (0.006) [0.004, 0.028]
Mother Education	0.002 (0.007) [-0.012, 0.015]	0.002 (0.007) [-0.012, 0.015]	0.002 (0.007) [-0.012, 0.015]	0.001 (0.007) [-0.012, 0.015]	0.002 (0.007) [-0.012, 0.015]	0.002 (0.007) [-0.012, 0.015]
Urban Location	0.033 (0.027) [-0.019, 0.086]	0.033 (0.027) [-0.020, 0.085]	0.034 (0.027) [-0.019, 0.086]	0.033 (0.027) [-0.019, 0.086]	0.032 (0.027) [-0.020, 0.085]	0.033 (0.027) [-0.020, 0.086]
Cognitive Ability (Z-Score)	0.076*** (0.016) [0.045, 0.106]	0.076*** (0.016) [0.045, 0.106]	0.076*** (0.016) [0.045, 0.106]	0.076*** (0.016) [0.045, 0.106]	0.076*** (0.016) [0.045, 0.106]	0.076*** (0.016) [0.045, 0.106]
Locus of Control	0.064* (0.027) [0.011, 0.116]	0.064* (0.027) [0.012, 0.117]	0.064* (0.027) [0.012, 0.117]	0.064* (0.027) [0.011, 0.116]	0.064* (0.027) [0.012, 0.117]	0.064* (0.027) [0.011, 0.116]
Self Concept	0.014 (0.022) [-0.029, 0.057]	0.014 (0.022) [-0.029, 0.057]	0.014 (0.022) [-0.029, 0.057]	0.014 (0.022) [-0.029, 0.057]	0.014 (0.022) [-0.029, 0.057]	0.014 (0.022) [-0.029, 0.057]
Non-Cognitive Ability (EXTERNAL)	0.117* (0.055) [0.008, 0.226]	0.116* (0.055) [0.008, 0.225]	0.117* (0.055) [0.008, 0.226]	0.117* (0.055) [0.008, 0.226]	0.117* (0.055) [0.008, 0.225]	0.117* (0.055) [0.008, 0.226]
Black - not Hispanic	-0.032 (0.051) [-0.131, 0.067]	-0.029 (0.049) [-0.126, 0.067]	-0.027 (0.049) [-0.124, 0.069]	-0.032 (0.051) [-0.131, 0.067]	-0.029 (0.049) [-0.126, 0.068]	-0.028 (0.049) [-0.125, 0.069]
American Indian or Alaska Native	-0.349* (0.170) [-0.682, -0.016]	-0.348* (0.170) [-0.682, -0.015]	-0.350* (0.170) [-0.683, -0.017]	-0.349* (0.170) [-0.683, -0.016]	-0.348* (0.170) [-0.682, -0.015]	-0.349* (0.170) [-0.683, -0.016]
Asian or Pacific Islander	0.122* (0.056) [0.013, 0.231]	0.120* (0.056) [0.011, 0.229]	0.122* (0.056) [0.014, 0.231]	0.122* (0.056) [0.013, 0.231]	0.120* (0.056) [0.011, 0.229]	0.122* (0.056) [0.014, 0.231]
Hispanic or Latino	0.101** (0.035) [0.033, 0.169]	0.102** (0.035) [0.034, 0.171]	0.102** (0.035) [0.033, 0.170]	0.101** (0.035) [0.033, 0.169]	0.102** (0.035) [0.034, 0.171]	0.102** (0.035) [0.033, 0.170]
Full Time Worker	0.958*** (0.040) [0.880, 1.036]	0.958*** (0.040) [0.880, 1.036]	0.959*** (0.040) [0.881, 1.037]	0.958*** (0.040) [0.880, 1.036]	0.958*** (0.040) [0.880, 1.036]	0.959*** (0.040) [0.881, 1.037]
Graduate in 1999 or Student in January 2000	-0.079** (0.029) [-0.135, -0.022]	-0.078** (0.029) [-0.135, -0.022]	-0.079** (0.029) [-0.136, -0.023]	-0.079** (0.029) [-0.135, -0.022]	-0.078** (0.029) [-0.135, -0.022]	-0.079** (0.029) [-0.136, -0.022]
Constant	8.375*** (0.237) [7.910, 8.840]	8.376*** (0.237) [7.911, 8.841]	8.374*** (0.237) [7.909, 8.838]	8.375*** (0.237) [7.910, 8.840]	8.376*** (0.237) [7.911, 8.841]	8.374*** (0.237) [7.909, 8.839]
Observations	3,380	3,380	3,380	3,380	3,380	3,380
Adjusted R-squared	0.295	0.295	0.295	0.295	0.295	0.295

**TABLE RBFO\_N4.2D: Log Annual Wage**  
**Dependent Variable: Logarithmic Annual Income in 1999**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.214 (0.113)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.401*** (0.116)				
Incremental Effect of College Athletics for Single-Parent Household			0.103 (0.109)			
Incremental Effect of College BB Athletics for Blacks				0.189 (0.209)		
Incremental Effect of College BB Athletics for Income Below Poverty Line					0.478*** (0.059)	
Incremental Effect of College BB Athletics for Single-Parent Household						0.472*** (0.059)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.  
\*\*\* p<0.001, \*\* p<0.01, \* p<0.05  
Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.  
Respondents without a wage are excluded.  
Source: NELS.

## TABLE RBFO\_E1.1A: High School Graduation

Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model

Sex: Male (Alternative BB/FB Definition)

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.046*** (0.009) [0.028 , 0.064]	
High School Sophomore BB/FB Varsity Athlete			0.047** (0.015) [0.018 , 0.077]
High School Sophomore Non BB/FB Varsity Athlete			0.046*** (0.009) [0.028 , 0.064]
Single-Parent Household	-0.027* (0.011) [-0.048 , -0.006]	-0.026* (0.011) [-0.047 , -0.005]	-0.026* (0.011) [-0.047 , -0.005]
Family Income (\$10K)	0.002* (0.001) [0.000 , 0.003]	0.001 (0.001) [-0.000 , 0.003]	0.001 (0.001) [-0.000 , 0.003]
Family Income Below Poverty Line	-0.070* (0.027) [-0.123 , -0.016]	-0.071** (0.027) [-0.123 , -0.018]	-0.070** (0.027) [-0.123 , -0.018]
Number of Siblings	-0.004 (0.003) [-0.011 , 0.002]	-0.005 (0.003) [-0.011 , 0.002]	-0.005 (0.004) [-0.012 , 0.002]
Father Education	0.001 (0.002) [-0.003 , 0.005]	0.000 (0.002) [-0.003 , 0.004]	0.000 (0.002) [-0.003 , 0.004]
Mother Education	0.002 (0.002) [-0.002 , 0.007]	0.002 (0.002) [-0.002 , 0.006]	0.002 (0.002) [-0.002 , 0.006]
Urban Location	0.006 (0.009) [-0.012 , 0.023]	0.006 (0.009) [-0.011 , 0.023]	0.006 (0.009) [-0.011 , 0.023]
Cognitive Ability (Z-Score)	0.026*** (0.006) [0.014 , 0.039]	0.026*** (0.006) [0.014 , 0.039]	0.026*** (0.006) [0.014 , 0.039]



## TABLE RBFO\_E1.1A: High School Graduation

**Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	-0.003 (0.007) [-0.017, 0.010]	-0.003 (0.007) [-0.017, 0.011]	-0.003 (0.007) [-0.017, 0.011]
Control Expectation Scale	0.001 (0.006) [-0.012, 0.013]	0.000 (0.006) [-0.012, 0.013]	0.000 (0.006) [-0.012, 0.013]
Instrumental Motivation - Utility Interest - Scale	0.010 (0.006) [-0.001, 0.021]	0.007 (0.006) [-0.004, 0.018]	0.007 (0.006) [-0.004, 0.018]
Non-Cognitive Ability (EXTERNAL)	0.099*** (0.019) [0.062, 0.135]	0.097*** (0.018) [0.061, 0.134]	0.097*** (0.018) [0.061, 0.134]
Black - not Hispanic	-0.015 (0.022) [-0.058, 0.028]	-0.014 (0.022) [-0.057, 0.029]	-0.014 (0.022) [-0.057, 0.028]
American Indian or Alaska Native	-0.064 (0.090) [-0.240, 0.113]	-0.063 (0.088) [-0.236, 0.110]	-0.063 (0.088) [-0.236, 0.110]
Asian or Pacific Islander	0.014 (0.010) [-0.006, 0.034]	0.019 (0.011) [-0.001, 0.040]	0.019 (0.011) [-0.001, 0.040]
Hispanic or Latino	-0.047* (0.019) [-0.083, -0.010]	-0.044* (0.018) [-0.080, -0.008]	-0.044* (0.018) [-0.080, -0.008]
Constant	0.535*** (0.078) [0.382, 0.687]	0.525*** (0.077) [0.374, 0.676]	0.525*** (0.077) [0.373, 0.677]
Observations	2,810	2,810	2,810
Adjusted R-squared	0.112	0.120	0.120

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E1.1B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.047*** (0.009) [0.029, 0.065]	0.036*** (0.009) [0.018, 0.053]	0.033*** (0.009) [0.014, 0.051]			
HS Sophomore Athlete × Black	-0.010 (0.044) [-0.097, 0.077]					
HS Sophomore Athlete × Income Below Poverty Line		0.117* (0.050) [0.020, 0.215]				
HS Sophomore Athlete × Single-Parent Household			0.041 (0.023) [-0.003, 0.086]			
High School Sophomore BB/FB Varsity Athlete				0.056*** (0.014) [0.027, 0.084]	0.049*** (0.014) [0.022, 0.075]	0.051*** (0.013) [0.025, 0.077]
High School Sophomore Non BB/FB Varsity Athlete				0.045*** (0.009) [0.027, 0.064]	0.033*** (0.009) [0.015, 0.050]	0.029** (0.009) [0.011, 0.048]
HS Sophomore BB/FB Athlete × Black				-0.056 (0.062) [-0.177, 0.066]		
HS Non BB/FB Varsity Athlete × Black				0.014 (0.046) [-0.076, 0.104]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					-0.015 (0.087) [-0.186, 0.156]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					0.163*** (0.049) [0.066, 0.259]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.008 (0.036) [-0.078, 0.062]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.054* (0.023) [0.009, 0.099]
Single-Parent Household	-0.026* (0.011) [-0.047, -0.005]	-0.026* (0.011) [-0.047, -0.005]	-0.050* (0.020) [-0.089, -0.011]	-0.026* (0.011) [-0.047, -0.005]	-0.026* (0.011) [-0.047, -0.005]	-0.050* (0.020) [-0.089, -0.011]
Family Income (\$10K)	0.001 (0.001) [-0.000, 0.003]	0.001 (0.001) [-0.000, 0.003]	0.001 (0.001) [-0.000, 0.003]	0.001 (0.001) [-0.000, 0.003]	0.001 (0.001) [-0.000, 0.003]	0.001 (0.001) [-0.000, 0.003]
Family Income Below Poverty Line	-0.071** (0.027) [-0.124, -0.018]	-0.129** (0.041) [-0.210, -0.048]	-0.069* (0.027) [-0.122, -0.016]	-0.071** (0.027) [-0.124, -0.018]	-0.129** (0.041) [-0.210, -0.048]	-0.069* (0.027) [-0.121, -0.016]
Number of Siblings	-0.005 (0.003) [-0.011, 0.002]	-0.005 (0.003) [-0.012, 0.002]	-0.005 (0.003) [-0.012, 0.002]	-0.005 (0.004) [-0.012, 0.002]	-0.005 (0.004) [-0.012, 0.002]	-0.005 (0.004) [-0.012, 0.002]

**TABLE RBFO\_E1.1B: High School Graduation**

Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model

Sex: Male (Alternative BB/FB Definition)

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.000 (0.002) [-0.003, 0.004]	0.000 (0.002) [-0.004, 0.004]	0.001 (0.002) [-0.003, 0.004]	0.000 (0.002) [-0.003, 0.004]	0.000 (0.002) [-0.004, 0.004]	0.000 (0.002) [-0.003, 0.004]
Mother Education	0.002 (0.002) [-0.002, 0.006]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.006]	0.002 (0.002) [-0.002, 0.006]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.006]
Urban Location	0.006 (0.009) [-0.011, 0.023]	0.007 (0.009) [-0.010, 0.024]	0.006 (0.009) [-0.011, 0.023]	0.007 (0.009) [-0.011, 0.024]	0.007 (0.009) [-0.010, 0.024]	0.006 (0.009) [-0.012, 0.023]
Cognitive Ability (Z-Score)	0.026*** (0.006) [0.014, 0.039]	0.026*** (0.006) [0.014, 0.038]	0.026*** (0.006) [0.014, 0.039]	0.026*** (0.006) [0.014, 0.038]	0.026*** (0.006) [0.013, 0.038]	0.026*** (0.006) [0.014, 0.039]
Action Control: General Effort and Persistence Scale	-0.003 (0.007) [-0.017, 0.011]	-0.003 (0.007) [-0.017, 0.011]	-0.003 (0.007) [-0.016, 0.011]	-0.003 (0.007) [-0.017, 0.011]	-0.003 (0.007) [-0.017, 0.011]	-0.002 (0.007) [-0.016, 0.011]
Control Expectation Scale	0.000 (0.006) [-0.012, 0.013]	0.000 (0.006) [-0.012, 0.012]	0.000 (0.006) [-0.012, 0.012]	0.000 (0.006) [-0.012, 0.013]	0.000 (0.006) [-0.012, 0.012]	0.001 (0.006) [-0.012, 0.013]
Instrumental Motivation - Utility Interest - Scale	0.007 (0.006) [-0.004, 0.018]	0.008 (0.006) [-0.004, 0.019]	0.007 (0.006) [-0.004, 0.018]	0.007 (0.006) [-0.004, 0.018]	0.007 (0.006) [-0.004, 0.018]	0.007 (0.006) [-0.004, 0.018]
Non-Cognitive Ability (EXTERNAL)	0.097*** (0.018) [0.061, 0.134]	0.099*** (0.018) [0.064, 0.135]	0.096*** (0.018) [0.060, 0.133]	0.098*** (0.018) [0.062, 0.134]	0.100*** (0.018) [0.064, 0.136]	0.097*** (0.019) [0.061, 0.134]
Black - not Hispanic	-0.009 (0.037) [-0.082, 0.065]	-0.016 (0.022) [-0.059, 0.026]	-0.015 (0.022) [-0.058, 0.028]	-0.009 (0.037) [-0.082, 0.064]	-0.016 (0.022) [-0.059, 0.026]	-0.013 (0.022) [-0.056, 0.030]
American Indian or Alaska Native	-0.063 (0.088) [-0.236, 0.110]	-0.056 (0.088) [-0.228, 0.116]	-0.065 (0.087) [-0.236, 0.106]	-0.065 (0.088) [-0.238, 0.108]	-0.060 (0.088) [-0.232, 0.112]	-0.063 (0.088) [-0.235, 0.109]
Asian or Pacific Islander	0.019 (0.011) [-0.001, 0.040]	0.022* (0.011) [0.001, 0.043]	0.019 (0.011) [-0.002, 0.040]	0.020 (0.011) [-0.001, 0.040]	0.021 (0.011) [-0.000, 0.042]	0.019 (0.011) [-0.002, 0.040]
Hispanic or Latino	-0.044* (0.018) [-0.080, -0.008]	-0.046* (0.018) [-0.081, -0.010]	-0.045* (0.018) [-0.081, -0.009]	-0.044* (0.018) [-0.080, -0.008]	-0.048** (0.018) [-0.084, -0.012]	-0.046* (0.018) [-0.082, -0.010]
Constant	0.525*** (0.077) [0.374, 0.676]	0.523*** (0.076) [0.374, 0.672]	0.535*** (0.077) [0.383, 0.686]	0.522*** (0.077) [0.371, 0.673]	0.518*** (0.076) [0.368, 0.668]	0.534*** (0.078) [0.381, 0.686]
Observations	2,810	2,810	2,810	2,810	2,810	2,810
Adjusted R-squared	0.120	0.124	0.121	0.120	0.128	0.122

**TABLE RBFO\_E1.1B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.037 (0.043)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.153** (0.049)				
Incremental Effect of HS Athletics for Single-Parent Household			0.074*** (0.021)			
Incremental Effect of HS BB/FB Athletics for Blacks				-0.000 (0.060)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.034 (0.086)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.043 (0.033)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E1.2A: High School Graduation

Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model

Sex: Female (Alternative BB Definition)

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.018** (0.007) [0.005 , 0.030]	
High School Sophomore BB Varsity Athlete			0.033* (0.016) [0.003 , 0.064]
High School Sophomore Non BB Varsity Athlete			0.017* (0.007) [0.004 , 0.030]
Single-Parent Household	-0.020** (0.008) [-0.035 , -0.006]	-0.019* (0.008) [-0.034 , -0.005]	-0.019* (0.008) [-0.034 , -0.005]
Family Income (\$10K)	-0.000 (0.000) [-0.001 , 0.001]	-0.000 (0.000) [-0.001 , 0.001]	-0.000 (0.000) [-0.001 , 0.001]
Family Income Below Poverty Line	-0.021 (0.016) [-0.053 , 0.011]	-0.020 (0.016) [-0.052 , 0.012]	-0.020 (0.016) [-0.052 , 0.012]
Number of Siblings	-0.004 (0.002) [-0.009 , 0.000]	-0.004 (0.002) [-0.009 , 0.001]	-0.004 (0.002) [-0.009 , 0.001]
Father Education	0.000 (0.002) [-0.002 , 0.003]	0.000 (0.002) [-0.003 , 0.003]	0.000 (0.002) [-0.003 , 0.003]
Mother Education	0.005** (0.002) [0.001 , 0.008]	0.004** (0.002) [0.001 , 0.007]	0.004** (0.002) [0.001 , 0.007]
Urban Location	0.002 (0.007) [-0.012 , 0.016]	0.002 (0.007) [-0.012 , 0.016]	0.002 (0.007) [-0.012 , 0.016]
Cognitive Ability (Z-Score)	0.032*** (0.004) [0.023 , 0.040]	0.031*** (0.004) [0.023 , 0.040]	0.031*** (0.004) [0.023 , 0.040]

## TABLE RBFO\_E1.2A: High School Graduation

Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model

Sex: Female (Alternative BB Definition)

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	0.001 (0.006) [-0.010, 0.012]	0.002 (0.006) [-0.010, 0.013]	0.002 (0.006) [-0.010, 0.013]
Control Expectation Scale	0.000 (0.007) [-0.013, 0.013]	-0.001 (0.007) [-0.014, 0.012]	-0.001 (0.007) [-0.014, 0.012]
Instrumental Motivation - Utility Interest - Scale	0.010* (0.004) [0.002, 0.018]	0.010* (0.004) [0.001, 0.018]	0.010* (0.004) [0.002, 0.018]
Non-Cognitive Ability (EXTERNAL)	0.063*** (0.016) [0.031, 0.094]	0.062*** (0.016) [0.030, 0.094]	0.062*** (0.016) [0.030, 0.093]
Black - not Hispanic	0.009 (0.014) [-0.018, 0.037]	0.010 (0.014) [-0.017, 0.037]	0.010 (0.014) [-0.018, 0.037]
American Indian or Alaska Native	0.027 (0.043) [-0.057, 0.111]	0.026 (0.043) [-0.057, 0.110]	0.026 (0.043) [-0.058, 0.109]
Asian or Pacific Islander	0.007 (0.009) [-0.010, 0.024]	0.010 (0.009) [-0.007, 0.028]	0.010 (0.009) [-0.007, 0.028]
Hispanic or Latino	-0.042** (0.015) [-0.072, -0.012]	-0.040** (0.015) [-0.070, -0.011]	-0.041** (0.015) [-0.070, -0.011]
Constant	0.668*** (0.067) [0.537, 0.799]	0.665*** (0.067) [0.533, 0.796]	0.665*** (0.067) [0.534, 0.797]
Observations	3,550	3,550	3,550
Adjusted R-squared	0.092	0.094	0.094

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E1.2B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.012 (0.007) [-0.001, 0.025]	0.015* (0.006) [0.003, 0.028]	0.012 (0.007) [-0.001, 0.025]			
HS Sophomore Athlete × Black	0.055* (0.027) [0.002, 0.107]					
HS Sophomore Athlete × Income Below Poverty Line		0.019 (0.030) [-0.040, 0.079]				
HS Sophomore Athlete × Single-Parent Household			0.015 (0.015) [-0.015, 0.046]			
High School Sophomore BB Varsity Athlete				0.032* (0.014) [0.004, 0.059]	0.030* (0.014) [0.003, 0.056]	0.018 (0.018) [-0.017, 0.053]
High School Sophomore Non BB Varsity Athlete				0.011 (0.007) [-0.002, 0.024]	0.015* (0.006) [0.002, 0.027]	0.011 (0.007) [-0.001, 0.024]
HS Sophomore BB Athlete × Black				0.020 (0.061) [-0.099, 0.139]		
HS Non BB Varsity Athlete × Black				0.058* (0.027) [0.005, 0.110]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.026 (0.075) [-0.121, 0.173]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.018 (0.031) [-0.043, 0.079]	
HS Sophomore BB Athlete × Single-Parent Household						0.039 (0.034) [-0.027, 0.106]
HS Non BB Varsity Athlete × Single-Parent Household						0.014 (0.016) [-0.017, 0.044]
Single-Parent Household	-0.019* (0.008) [-0.034, -0.005]	-0.020** (0.008) [-0.034, -0.005]	-0.028* (0.013) [-0.052, -0.003]	-0.019* (0.008) [-0.034, -0.005]	-0.020** (0.008) [-0.034, -0.005]	-0.027* (0.013) [-0.052, -0.003]
Family Income (\$10K)	-0.000 (0.000) [-0.001, 0.001]	-0.000 (0.000) [-0.001, 0.001]	-0.000 (0.000) [-0.001, 0.001]	-0.000 (0.000) [-0.001, 0.001]	-0.000 (0.000) [-0.001, 0.001]	-0.000 (0.000) [-0.001, 0.001]
Family Income Below Poverty Line	-0.019 (0.016) [-0.051, 0.013]	-0.027 (0.022) [-0.070, 0.016]	-0.019 (0.016) [-0.052, 0.013]	-0.019 (0.016) [-0.051, 0.013]	-0.027 (0.022) [-0.070, 0.016]	-0.020 (0.016) [-0.052, 0.012]
Number of Siblings	-0.004 (0.002) [-0.009, 0.001]	-0.004 (0.002) [-0.009, 0.001]	-0.004 (0.002) [-0.009, 0.001]	-0.004 (0.002) [-0.009, 0.001]	-0.004 (0.002) [-0.009, 0.001]	-0.004 (0.002) [-0.009, 0.001]

**TABLE RBFO\_E1.2B: High School Graduation**

Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model

Sex: Female (Alternative BB Definition)

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.000 (0.002) [-0.003, 0.003]	0.000 (0.002) [-0.003, 0.003]	0.000 (0.002) [-0.003, 0.003]	0.000 (0.002) [-0.003, 0.003]	0.000 (0.002) [-0.003, 0.003]	0.000 (0.002) [-0.003, 0.003]
Mother Education	0.004** (0.002) [0.001, 0.008]	0.004** (0.002) [0.001, 0.007]	0.004** (0.002) [0.001, 0.008]	0.004** (0.002) [0.001, 0.008]	0.004** (0.002) [0.001, 0.007]	0.004** (0.002) [0.001, 0.007]
Urban Location	0.002 (0.007) [-0.012, 0.016]	0.002 (0.007) [-0.012, 0.016]	0.002 (0.007) [-0.012, 0.016]	0.002 (0.007) [-0.012, 0.016]	0.002 (0.007) [-0.012, 0.016]	0.002 (0.007) [-0.012, 0.016]
Cognitive Ability (Z-Score)	0.031*** (0.004) [0.023, 0.040]	0.031*** (0.004) [0.023, 0.040]	0.031*** (0.004) [0.023, 0.040]	0.031*** (0.004) [0.023, 0.040]	0.031*** (0.004) [0.023, 0.040]	0.031*** (0.004) [0.023, 0.040]
Action Control: General Effort and Persistence Scale	0.002 (0.006) [-0.010, 0.013]	0.002 (0.006) [-0.010, 0.013]	0.002 (0.006) [-0.010, 0.013]	0.002 (0.006) [-0.010, 0.013]	0.002 (0.006) [-0.010, 0.013]	0.002 (0.006) [-0.010, 0.013]
Control Expectation Scale	-0.001 (0.007) [-0.013, 0.012]	-0.001 (0.007) [-0.014, 0.012]	-0.001 (0.007) [-0.014, 0.012]	-0.001 (0.007) [-0.013, 0.012]	-0.001 (0.007) [-0.014, 0.012]	-0.001 (0.007) [-0.014, 0.012]
Instrumental Motivation - Utility Interest - Scale	0.010* (0.004) [0.002, 0.018]	0.009* (0.004) [0.001, 0.018]	0.010* (0.004) [0.001, 0.018]	0.010* (0.004) [0.002, 0.018]	0.010* (0.004) [0.002, 0.018]	0.010* (0.004) [0.002, 0.018]
Non-Cognitive Ability (EXTERNAL)	0.062*** (0.016) [0.031, 0.094]	0.062*** (0.016) [0.030, 0.094]	0.062*** (0.016) [0.030, 0.093]	0.062*** (0.016) [0.031, 0.094]	0.062*** (0.016) [0.030, 0.094]	0.062*** (0.016) [0.030, 0.093]
Black - not Hispanic	-0.017 (0.023) [-0.062, 0.028]	0.010 (0.014) [-0.017, 0.037]	0.010 (0.014) [-0.017, 0.037]	-0.017 (0.023) [-0.062, 0.028]	0.010 (0.014) [-0.018, 0.037]	0.010 (0.014) [-0.018, 0.037]
American Indian or Alaska Native	0.026 (0.043) [-0.058, 0.109]	0.026 (0.042) [-0.057, 0.109]	0.026 (0.042) [-0.057, 0.109]	0.025 (0.043) [-0.058, 0.109]	0.026 (0.042) [-0.058, 0.109]	0.025 (0.042) [-0.058, 0.108]
Asian or Pacific Islander	0.009 (0.009) [-0.008, 0.027]	0.010 (0.009) [-0.007, 0.028]	0.010 (0.009) [-0.008, 0.027]	0.009 (0.009) [-0.008, 0.027]	0.010 (0.009) [-0.007, 0.028]	0.009 (0.009) [-0.008, 0.027]
Hispanic or Latino	-0.041** (0.015) [-0.071, -0.012]	-0.040** (0.015) [-0.070, -0.011]	-0.040** (0.015) [-0.070, -0.011]	-0.041** (0.015) [-0.071, -0.012]	-0.041** (0.015) [-0.070, -0.011]	-0.041** (0.015) [-0.070, -0.011]
Constant	0.664*** (0.067) [0.533, 0.795]	0.665*** (0.067) [0.534, 0.797]	0.668*** (0.067) [0.537, 0.799]	0.664*** (0.067) [0.533, 0.795]	0.665*** (0.067) [0.534, 0.797]	0.669*** (0.067) [0.538, 0.800]
Observations	3,550	3,550	3,550	3,550	3,550	3,550
Adjusted R-squared	0.095	0.094	0.094	0.095	0.093	0.094



**TABLE RBFO\_E1.2B: High School Graduation**  
**Dependent Variable: High School Diploma or GED Received by 2004; Linear Probability Model**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.067** (0.026)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.035 (0.030)				
Incremental Effect of HS Athletics for Single-Parent Household			0.027* (0.014)			
Incremental Effect of HS BB Athletics for Blacks				0.052 (0.059)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.056 (0.074)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.058* (0.028)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E2.1A: College Attendance

**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.043** (0.013) [0.017 , 0.069]	
High School Sophomore BB/FB Varsity Athlete			-0.006 (0.024) [-0.053 , 0.042]
High School Sophomore Non BB/FB Varsity Athlete			0.054*** (0.013) [0.028 , 0.080]
Single-Parent Household	-0.038* (0.016) [-0.068 , -0.007]	-0.037* (0.016) [-0.068 , -0.006]	-0.036* (0.016) [-0.067 , -0.005]
Family Income (\$10K)	0.003* (0.001) [0.000 , 0.005]	0.002* (0.001) [0.000 , 0.005]	0.002 (0.001) [-0.000 , 0.005]
Family Income Below Poverty Line	-0.069* (0.033) [-0.134 , -0.003]	-0.070* (0.033) [-0.135 , -0.005]	-0.072* (0.033) [-0.137 , -0.007]
Number of Siblings	-0.006 (0.005) [-0.015 , 0.004]	-0.006 (0.005) [-0.015 , 0.003]	-0.005 (0.005) [-0.015 , 0.004]
Father Education	0.011*** (0.003) [0.006 , 0.016]	0.011*** (0.003) [0.006 , 0.016]	0.011*** (0.003) [0.006 , 0.016]
Mother Education	0.010*** (0.003) [0.004 , 0.016]	0.010** (0.003) [0.004 , 0.016]	0.010** (0.003) [0.004 , 0.016]
Urban Location	0.059*** (0.012) [0.037 , 0.082]	0.059*** (0.012) [0.036 , 0.082]	0.058*** (0.012) [0.035 , 0.081]
Cognitive Ability (Z-Score)	0.056*** (0.009) [0.039 , 0.073]	0.056*** (0.009) [0.040 , 0.073]	0.057*** (0.009) [0.040 , 0.074]

## TABLE RBFO\_E2.1A: College Attendance

**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	-0.001 (0.010) [-0.020, 0.018]	-0.000 (0.010) [-0.020, 0.019]	-0.000 (0.010) [-0.019, 0.019]
Control Expectation Scale	0.020* (0.009) [0.002, 0.038]	0.020* (0.009) [0.002, 0.038]	0.019* (0.009) [0.001, 0.037]
Instrumental Motivation - Utility Interest - Scale	0.017* (0.008) [0.001, 0.033]	0.014 (0.008) [-0.002, 0.030]	0.014 (0.008) [-0.002, 0.030]
Non-Cognitive Ability (EXTERNAL)	0.109*** (0.023) [0.064, 0.153]	0.109*** (0.023) [0.064, 0.153]	0.107*** (0.023) [0.063, 0.151]
Black - not Hispanic	0.068** (0.026) [0.018, 0.118]	0.069** (0.025) [0.019, 0.119]	0.076** (0.026) [0.026, 0.126]
American Indian or Alaska Native	-0.146 (0.135) [-0.411, 0.118]	-0.149 (0.136) [-0.415, 0.116]	-0.136 (0.136) [-0.403, 0.131]
Asian or Pacific Islander	0.063*** (0.016) [0.032, 0.094]	0.068*** (0.016) [0.037, 0.100]	0.068*** (0.016) [0.036, 0.099]
Hispanic or Latino	0.025 (0.023) [-0.021, 0.071]	0.028 (0.023) [-0.018, 0.074]	0.028 (0.023) [-0.018, 0.074]
Constant	0.106 (0.099) [-0.088, 0.300]	0.092 (0.100) [-0.104, 0.287]	0.106 (0.100) [-0.089, 0.301]
Observations	2,640	2,640	2,640
Adjusted R-squared	0.164	0.167	0.170

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E2.1B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.045** (0.014) [0.018, 0.072]	0.040** (0.013) [0.014, 0.066]	0.045** (0.015) [0.016, 0.074]			
HS Sophomore Athlete × Black	-0.021 (0.051) [-0.120, 0.078]					
HS Sophomore Athlete × Income Below Poverty Line		0.038 (0.063) [-0.085, 0.161]				
HS Sophomore Athlete × Single-Parent Household			-0.007 (0.031) [-0.067, 0.054]			
High School Sophomore BB/FB Varsity Athlete				-0.004 (0.026) [-0.055, 0.047]	-0.011 (0.025) [-0.060, 0.037]	0.028 (0.026) [-0.023, 0.079]
High School Sophomore Non BB/FB Varsity Athlete				0.055*** (0.014) [0.028, 0.082]	0.051*** (0.013) [0.025, 0.078]	0.049*** (0.015) [0.020, 0.078]
HS Sophomore BB/FB Athlete × Black				-0.017 (0.073) [-0.159, 0.126]		
HS Non BB/FB Varsity Athlete × Black				-0.008 (0.053) [-0.111, 0.096]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					0.062 (0.107) [-0.147, 0.271]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					0.035 (0.065) [-0.093, 0.162]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.095 (0.055) [-0.201, 0.012]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.020 (0.031) [-0.041, 0.082]
Single-Parent Household	-0.037* (0.016) [-0.068, -0.006]	-0.037* (0.016) [-0.068, -0.006]	-0.033 (0.026) [-0.083, 0.018]	-0.036* (0.016) [-0.067, -0.005]	-0.036* (0.016) [-0.067, -0.005]	-0.034 (0.026) [-0.085, 0.016]
Family Income (\$10K)	0.002* (0.001) [0.000, 0.005]	0.002* (0.001) [0.000, 0.005]	0.002* (0.001) [0.000, 0.005]	0.002 (0.001) [-0.000, 0.005]	0.002 (0.001) [-0.000, 0.005]	0.002* (0.001) [0.000, 0.005]
Family Income Below Poverty Line	-0.071* (0.033) [-0.136, -0.005]	-0.091 (0.050) [-0.189, 0.007]	-0.070* (0.033) [-0.136, -0.005]	-0.073* (0.033) [-0.138, -0.007]	-0.095 (0.050) [-0.193, 0.004]	-0.072* (0.033) [-0.137, -0.007]
Number of Siblings	-0.006 (0.005) [-0.015, 0.003]	-0.006 (0.005) [-0.015, 0.003]	-0.006 (0.005) [-0.015, 0.003]	-0.005 (0.005) [-0.014, 0.004]	-0.005 (0.005) [-0.015, 0.004]	-0.005 (0.005) [-0.014, 0.004]

**TABLE RBFO\_E2.1B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.016]	0.011*** (0.003) [0.006, 0.015]
Mother Education	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.010** (0.003) [0.004, 0.016]	0.009** (0.003) [0.003, 0.015]
Urban Location	0.059*** (0.012) [0.036, 0.082]	0.060*** (0.012) [0.037, 0.083]	0.059*** (0.012) [0.036, 0.082]	0.058*** (0.012) [0.036, 0.081]	0.059*** (0.012) [0.036, 0.081]	0.057*** (0.012) [0.034, 0.080]
Cognitive Ability (Z-Score)	0.056*** (0.009) [0.039, 0.073]	0.056*** (0.009) [0.039, 0.073]	0.056*** (0.009) [0.040, 0.073]	0.057*** (0.009) [0.040, 0.074]	0.057*** (0.009) [0.040, 0.073]	0.056*** (0.009) [0.040, 0.073]
Action Control: General Effort and Persistence Scale	-0.000 (0.010) [-0.020, 0.019]	-0.001 (0.010) [-0.020, 0.019]	-0.001 (0.010) [-0.020, 0.019]	-0.000 (0.010) [-0.019, 0.019]	-0.000 (0.010) [-0.019, 0.019]	-0.000 (0.010) [-0.019, 0.019]
Control Expectation Scale	0.020* (0.009) [0.002, 0.038]	0.020* (0.009) [0.002, 0.038]	0.020* (0.009) [0.002, 0.038]	0.019* (0.009) [0.001, 0.037]	0.019* (0.009) [0.002, 0.037]	0.020* (0.009) [0.002, 0.038]
Instrumental Motivation - Utility Interest - Scale	0.014 (0.008) [-0.003, 0.030]	0.014 (0.008) [-0.002, 0.030]	0.014 (0.008) [-0.002, 0.030]	0.014 (0.008) [-0.002, 0.030]	0.014 (0.008) [-0.002, 0.030]	0.014 (0.008) [-0.003, 0.030]
Non-Cognitive Ability (EXTERNAL)	0.109*** (0.023) [0.064, 0.153]	0.110*** (0.023) [0.065, 0.154]	0.109*** (0.023) [0.064, 0.153]	0.107*** (0.023) [0.063, 0.151]	0.108*** (0.023) [0.063, 0.152]	0.108*** (0.023) [0.064, 0.152]
Black - not Hispanic	0.082 (0.042) [-0.001, 0.165]	0.069** (0.026) [0.019, 0.120]	0.069** (0.025) [0.019, 0.119]	0.082 (0.042) [-0.000, 0.165]	0.076** (0.026) [0.026, 0.127]	0.079** (0.026) [0.029, 0.129]
American Indian or Alaska Native	-0.150 (0.136) [-0.416, 0.116]	-0.148 (0.136) [-0.415, 0.119]	-0.149 (0.136) [-0.415, 0.117]	-0.136 (0.136) [-0.403, 0.130]	-0.133 (0.137) [-0.401, 0.134]	-0.131 (0.138) [-0.403, 0.140]
Asian or Pacific Islander	0.069*** (0.016) [0.037, 0.100]	0.070*** (0.016) [0.038, 0.101]	0.068*** (0.016) [0.037, 0.100]	0.068*** (0.016) [0.036, 0.099]	0.069*** (0.016) [0.038, 0.101]	0.068*** (0.016) [0.037, 0.100]
Hispanic or Latino	0.028 (0.023) [-0.018, 0.074]	0.027 (0.023) [-0.019, 0.073]	0.028 (0.023) [-0.018, 0.074]	0.028 (0.023) [-0.018, 0.074]	0.028 (0.023) [-0.018, 0.074]	0.026 (0.023) [-0.020, 0.072]
Constant	0.091 (0.100) [-0.104, 0.287]	0.089 (0.100) [-0.106, 0.285]	0.090 (0.100) [-0.106, 0.286]	0.105 (0.100) [-0.090, 0.301]	0.104 (0.100) [-0.092, 0.299]	0.103 (0.100) [-0.093, 0.299]
Observations	2,640	2,640	2,640	2,640	2,640	2,640
Adjusted R-squared	0.167	0.167	0.167	0.169	0.169	0.171

**TABLE RBFO\_E2.1B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.024 (0.049)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.078 (0.062)				
Incremental Effect of HS Athletics for Single-Parent Household			0.038 (0.027)			
Incremental Effect of HS BB/FB Athletics for Blacks				-0.021 (0.068)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.051 (0.104)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						-0.067 (0.048)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E2.2A: College Attendance

**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.058*** (0.010) [0.039, 0.078]	
High School Sophomore BB Varsity Athlete			0.016 (0.033) [-0.050, 0.081]
High School Sophomore Non BB Varsity Athlete			0.061*** (0.010) [0.041, 0.080]
Single-Parent Household	-0.032** (0.012) [-0.055, -0.009]	-0.029* (0.012) [-0.051, -0.006]	-0.029* (0.012) [-0.051, -0.006]
Family Income (\$10K)	0.001 (0.001) [-0.000, 0.003]	0.001 (0.001) [-0.001, 0.003]	0.001 (0.001) [-0.001, 0.003]
Family Income Below Poverty Line	-0.018 (0.023) [-0.062, 0.027]	-0.014 (0.023) [-0.059, 0.031]	-0.014 (0.023) [-0.059, 0.031]
Number of Siblings	-0.016*** (0.004) [-0.023, -0.008]	-0.015*** (0.004) [-0.023, -0.008]	-0.015*** (0.004) [-0.023, -0.008]
Father Education	0.008*** (0.002) [0.005, 0.012]	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]
Mother Education	0.007** (0.002) [0.002, 0.011]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]
Urban Location	0.018 (0.010) [-0.001, 0.037]	0.019* (0.010) [0.000, 0.038]	0.019 (0.010) [-0.000, 0.038]
Cognitive Ability (Z-Score)	0.060*** (0.007) [0.046, 0.073]	0.059*** (0.007) [0.045, 0.072]	0.059*** (0.007) [0.045, 0.072]

## TABLE RBFO\_E2.2A: College Attendance

**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	-0.007 (0.008) [-0.023 , 0.008]	-0.005 (0.008) [-0.021 , 0.010]	-0.005 (0.008) [-0.021 , 0.010]
Control Expectation Scale	0.008 (0.008) [-0.007 , 0.023]	0.005 (0.008) [-0.010 , 0.020]	0.005 (0.008) [-0.010 , 0.020]
Instrumental Motivation - Utility Interest - Scale	0.011 (0.006) [-0.000 , 0.023]	0.010 (0.006) [-0.001 , 0.022]	0.010 (0.006) [-0.002 , 0.022]
Non-Cognitive Ability (EXTERNAL)	0.076*** (0.021) [0.034 , 0.117]	0.074*** (0.021) [0.033 , 0.114]	0.074*** (0.021) [0.033 , 0.115]
Black - not Hispanic	0.066*** (0.019) [0.028 , 0.103]	0.068*** (0.019) [0.030 , 0.105]	0.069*** (0.019) [0.031 , 0.107]
American Indian or Alaska Native	0.138** (0.044) [0.053 , 0.223]	0.135** (0.043) [0.051 , 0.219]	0.136** (0.043) [0.051 , 0.221]
Asian or Pacific Islander	0.057*** (0.012) [0.033 , 0.081]	0.067*** (0.012) [0.043 , 0.092]	0.067*** (0.012) [0.043 , 0.092]
Hispanic or Latino	0.037* (0.019) [0.001 , 0.073]	0.042* (0.019) [0.006 , 0.079]	0.043* (0.019) [0.006 , 0.079]
Constant	0.406*** (0.090) [0.229 , 0.583]	0.394*** (0.089) [0.219 , 0.570]	0.394*** (0.089) [0.218 , 0.569]
Observations	3,410	3,410	3,410
Adjusted R-squared	0.119	0.128	0.129

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.



**TABLE RBFO\_E2.2B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.061*** (0.010) [0.040, 0.081]	0.059*** (0.010) [0.039, 0.079]	0.049*** (0.011) [0.028, 0.071]			
HS Sophomore Athlete x Black	-0.026 (0.037) [-0.099, 0.046]					
HS Sophomore Athlete x Income Below Poverty Line		-0.009 (0.041) [-0.090, 0.073]				
HS Sophomore Athlete x Single-Parent Household			0.025 (0.023) [-0.019, 0.069]			
High School Sophomore BB Varsity Athlete				0.036 (0.033) [-0.029, 0.101]	0.009 (0.035) [-0.059, 0.076]	0.004 (0.040) [-0.074, 0.082]
High School Sophomore Non BB Varsity Athlete				0.062*** (0.010) [0.041, 0.083]	0.062*** (0.010) [0.042, 0.081]	0.051*** (0.011) [0.030, 0.073]
HS Sophomore BB Athlete x Black				-0.114 (0.112) [-0.332, 0.105]		
HS Non BB Varsity Athlete x Black				-0.014 (0.037) [-0.086, 0.058]		
HS Sophomore BB Athlete x Income Below Poverty Line					0.058 (0.117) [-0.171, 0.286]	
HS Non BB Varsity Athlete x Income Below Poverty Line					-0.013 (0.042) [-0.096, 0.070]	
HS Sophomore BB Athlete x Single-Parent Household						0.031 (0.072) [-0.110, 0.173]
HS Non BB Varsity Athlete x Single-Parent Household						0.026 (0.023) [-0.019, 0.070]
Single-Parent Household	-0.029* (0.012) [-0.051, -0.006]	-0.029* (0.012) [-0.051, -0.006]	-0.042* (0.019) [-0.079, -0.005]	-0.028* (0.012) [-0.051, -0.006]	-0.029* (0.012) [-0.051, -0.006]	-0.042* (0.019) [-0.080, -0.005]
Family Income (\$10K)	0.001 (0.001) [-0.001, 0.003]	0.001 (0.001) [-0.001, 0.003]	0.001 (0.001) [-0.001, 0.003]	0.001 (0.001) [-0.001, 0.003]	0.001 (0.001) [-0.001, 0.003]	0.001 (0.001) [-0.001, 0.003]
Family Income Below Poverty Line	-0.014 (0.023) [-0.059, 0.030]	-0.011 (0.030) [-0.069, 0.048]	-0.014 (0.023) [-0.058, 0.031]	-0.015 (0.023) [-0.059, 0.030]	-0.011 (0.030) [-0.070, 0.047]	-0.013 (0.023) [-0.058, 0.031]
Number of Siblings	-0.015*** (0.004) [-0.023, -0.008]	-0.015*** (0.004) [-0.023, -0.008]	-0.015*** (0.004) [-0.023, -0.008]	-0.015*** (0.004) [-0.023, -0.008]	-0.015*** (0.004) [-0.023, -0.008]	-0.015*** (0.004) [-0.023, -0.008]

**TABLE RBFO\_E2.2B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]	0.008*** (0.002) [0.004, 0.012]
Mother Education	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]
Urban Location	0.019* (0.010) [0.000, 0.038]	0.019* (0.010) [0.000, 0.038]	0.019* (0.010) [0.000, 0.038]	0.019 (0.010) [-0.000, 0.038]	0.019 (0.010) [-0.000, 0.038]	0.019 (0.010) [-0.000, 0.038]
Cognitive Ability (Z-Score)	0.059*** (0.007) [0.045, 0.073]	0.059*** (0.007) [0.045, 0.072]	0.059*** (0.007) [0.045, 0.072]	0.059*** (0.007) [0.045, 0.072]	0.059*** (0.007) [0.045, 0.072]	0.059*** (0.007) [0.045, 0.072]
Action Control: General Effort and Persistence Scale	-0.006 (0.008) [-0.021, 0.010]	-0.006 (0.008) [-0.021, 0.010]	-0.005 (0.008) [-0.021, 0.010]	-0.005 (0.008) [-0.021, 0.010]	-0.006 (0.008) [-0.021, 0.010]	-0.005 (0.008) [-0.020, 0.010]
Control Expectation Scale	0.005 (0.008) [-0.010, 0.020]	0.005 (0.008) [-0.010, 0.020]	0.005 (0.008) [-0.010, 0.020]	0.005 (0.008) [-0.010, 0.020]	0.005 (0.008) [-0.010, 0.020]	0.005 (0.008) [-0.010, 0.020]
Instrumental Motivation - Utility Interest - Scale	0.010 (0.006) [-0.002, 0.022]	0.010 (0.006) [-0.001, 0.022]	0.010 (0.006) [-0.002, 0.022]	0.010 (0.006) [-0.002, 0.021]	0.010 (0.006) [-0.002, 0.022]	0.010 (0.006) [-0.002, 0.022]
Non-Cognitive Ability (EXTERNAL)	0.073*** (0.021) [0.032, 0.114]	0.073*** (0.021) [0.033, 0.114]	0.074*** (0.021) [0.033, 0.115]	0.073*** (0.021) [0.033, 0.114]	0.074*** (0.021) [0.033, 0.115]	0.074*** (0.021) [0.033, 0.115]
Black - not Hispanic	0.081** (0.029) [0.024, 0.137]	0.068*** (0.019) [0.030, 0.106]	0.067*** (0.019) [0.029, 0.105]	0.081** (0.029) [0.024, 0.137]	0.069*** (0.019) [0.031, 0.107]	0.069*** (0.019) [0.031, 0.106]
American Indian or Alaska Native	0.135** (0.043) [0.051, 0.220]	0.135** (0.043) [0.051, 0.220]	0.135** (0.043) [0.051, 0.219]	0.136** (0.043) [0.051, 0.220]	0.137** (0.043) [0.052, 0.222]	0.136** (0.043) [0.051, 0.220]
Asian or Pacific Islander	0.068*** (0.013) [0.043, 0.092]	0.067*** (0.012) [0.043, 0.092]	0.067*** (0.012) [0.042, 0.091]	0.068*** (0.013) [0.043, 0.093]	0.068*** (0.012) [0.043, 0.092]	0.067*** (0.013) [0.042, 0.091]
Hispanic or Latino	0.042* (0.019) [0.006, 0.079]	0.042* (0.019) [0.006, 0.078]	0.042* (0.019) [0.006, 0.079]	0.043* (0.019) [0.007, 0.079]	0.043* (0.019) [0.007, 0.079]	0.043* (0.019) [0.007, 0.079]
Constant	0.395*** (0.090) [0.219, 0.570]	0.394*** (0.089) [0.219, 0.570]	0.399*** (0.090) [0.223, 0.575]	0.393*** (0.090) [0.218, 0.569]	0.392*** (0.089) [0.217, 0.568]	0.398*** (0.090) [0.223, 0.574]
Observations	3,410	3,410	3,410	3,410	3,410	3,410
Adjusted R-squared	0.128	0.128	0.129	0.129	0.128	0.129

**TABLE RBFO\_E2.2B: College Attendance**  
**Dependent Variable: Attended Any PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.035 (0.035)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.050 (0.040)				
Incremental Effect of HS Athletics for Single-Parent Household			0.074*** (0.020)			
Incremental Effect of HS BB Athletics for Blacks				-0.078 (0.106)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.066 (0.111)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.035 (0.060)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E2.3A: College Attendance

**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.103*** (0.017) [0.069 , 0.136]	
High School Sophomore BB/FB Varsity Athlete			0.044 (0.028) [-0.011 , 0.099]
High School Sophomore Non BB/FB Varsity Athlete			0.116*** (0.018) [0.081 , 0.151]
Single-Parent Household	-0.056** (0.020) [-0.094 , -0.017]	-0.054** (0.020) [-0.092 , -0.015]	-0.052** (0.020) [-0.091 , -0.014]
Family Income (\$10K)	0.008*** (0.002) [0.004 , 0.012]	0.007*** (0.002) [0.003 , 0.011]	0.007*** (0.002) [0.003 , 0.011]
Family Income Below Poverty Line	0.023 (0.036) [-0.048 , 0.095]	0.020 (0.036) [-0.051 , 0.091]	0.018 (0.036) [-0.053 , 0.089]
Number of Siblings	-0.011 (0.006) [-0.023 , 0.001]	-0.011 (0.006) [-0.023 , 0.001]	-0.011 (0.006) [-0.022 , 0.001]
Father Education	0.020*** (0.004) [0.013 , 0.027]	0.019*** (0.004) [0.012 , 0.026]	0.019*** (0.004) [0.011 , 0.026]
Mother Education	0.010* (0.004) [0.002 , 0.019]	0.009* (0.004) [0.001 , 0.018]	0.009* (0.004) [0.001 , 0.017]
Urban Location	0.054** (0.017) [0.021 , 0.088]	0.054** (0.017) [0.021 , 0.087]	0.053** (0.017) [0.020 , 0.086]
Cognitive Ability (Z-Score)	0.170*** (0.010) [0.150 , 0.189]	0.170*** (0.010) [0.150 , 0.189]	0.170*** (0.010) [0.151 , 0.190]

## TABLE RBFO\_E2.3A: College Attendance

**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	0.009 (0.014) [-0.018 , 0.036]	0.011 (0.014) [-0.016 , 0.038]	0.011 (0.014) [-0.016 , 0.038]
Control Expectation Scale	0.018 (0.012) [-0.007 , 0.042]	0.017 (0.012) [-0.007 , 0.041]	0.016 (0.012) [-0.008 , 0.040]
Instrumental Motivation - Utility Interest - Scale	0.033** (0.011) [0.010 , 0.055]	0.026* (0.011) [0.004 , 0.049]	0.026* (0.011) [0.004 , 0.049]
Non-Cognitive Ability (EXTERNAL)	0.116*** (0.023) [0.072 , 0.161]	0.116*** (0.023) [0.072 , 0.160]	0.114*** (0.022) [0.070 , 0.158]
Black - not Hispanic	0.125*** (0.035) [0.057 , 0.193]	0.128*** (0.034) [0.062 , 0.195]	0.136*** (0.034) [0.069 , 0.203]
American Indian or Alaska Native	-0.118 (0.102) [-0.319 , 0.083]	-0.125 (0.098) [-0.316 , 0.066]	-0.109 (0.096) [-0.297 , 0.079]
Asian or Pacific Islander	0.014 (0.028) [-0.041 , 0.068]	0.027 (0.028) [-0.027 , 0.081]	0.026 (0.028) [-0.028 , 0.080]
Hispanic or Latino	-0.089** (0.028) [-0.144 , -0.034]	-0.084** (0.028) [-0.138 , -0.029]	-0.083** (0.028) [-0.138 , -0.028]
Constant	-0.347*** (0.104) [-0.551 , -0.143]	-0.382*** (0.104) [-0.585 , -0.179]	-0.365*** (0.103) [-0.568 , -0.162]
Observations	2,640	2,640	2,640
Adjusted R-squared	0.296	0.306	0.307

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E2.3B: College Attendance**

**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.100*** (0.018) [0.065, 0.135]	0.104*** (0.018) [0.069, 0.139]	0.109*** (0.020) [0.070, 0.149]			
HS Sophomore Athlete × Black	0.036 (0.067) [-0.095, 0.167]					
HS Sophomore Athlete × Income Below Poverty Line		-0.014 (0.066) [-0.143, 0.115]				
HS Sophomore Athlete × Single-Parent Household			-0.021 (0.037) [-0.093, 0.052]			
High School Sophomore BB/FB Varsity Athlete				0.035 (0.030) [-0.024, 0.094]	0.037 (0.029) [-0.020, 0.094]	0.058 (0.035) [-0.011, 0.126]
High School Sophomore Non BB/FB Varsity Athlete				0.113*** (0.018) [0.077, 0.149]	0.119*** (0.018) [0.083, 0.155]	0.119*** (0.021) [0.079, 0.160]
HS Sophomore BB/FB Athlete × Black				0.075 (0.087) [-0.097, 0.246]		
HS Non BB/FB Varsity Athlete × Black				0.036 (0.074) [-0.108, 0.181]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					0.091 (0.105) [-0.114, 0.297]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.040 (0.070) [-0.178, 0.098]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.038 (0.059) [-0.153, 0.077]
HS Non BB/FB Varsity Athlete × Single-Parent Household						-0.010 (0.039) [-0.087, 0.066]
Single-Parent Household	-0.053** (0.020) [-0.092, -0.015]	-0.054** (0.020) [-0.092, -0.015]	-0.041 (0.030) [-0.100, 0.017]	-0.052** (0.020) [-0.091, -0.014]	-0.053** (0.020) [-0.091, -0.014]	-0.043 (0.030) [-0.101, 0.015]
Family Income (\$10K)	0.007*** (0.002) [0.003, 0.011]	0.007*** (0.002) [0.003, 0.011]	0.007*** (0.002) [0.003, 0.011]	0.007*** (0.002) [0.003, 0.011]	0.007*** (0.002) [0.003, 0.011]	0.007*** (0.002) [0.003, 0.011]
Family Income Below Poverty Line	0.021 (0.036) [-0.050, 0.093]	0.028 (0.049) [-0.068, 0.124]	0.020 (0.036) [-0.051, 0.091]	0.020 (0.036) [-0.052, 0.091]	0.023 (0.049) [-0.073, 0.119]	0.017 (0.036) [-0.054, 0.089]
Number of Siblings	-0.011 (0.006) [-0.023, 0.001]	-0.011 (0.006) [-0.023, 0.001]	-0.011 (0.006) [-0.023, 0.001]	-0.011 (0.006) [-0.023, 0.001]	-0.011 (0.006) [-0.023, 0.001]	-0.011 (0.006) [-0.022, 0.001]

**TABLE RBFO\_E2.3B: College Attendance**

**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model  
Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.019*** (0.004) [0.012, 0.026]	0.019*** (0.004) [0.012, 0.026]	0.019*** (0.004) [0.012, 0.026]	0.019*** (0.004) [0.012, 0.026]	0.018*** (0.004) [0.011, 0.026]	0.018*** (0.004) [0.011, 0.026]
Mother Education	0.009* (0.004) [0.001, 0.018]	0.009* (0.004) [0.001, 0.018]	0.009* (0.004) [0.001, 0.018]	0.009* (0.004) [0.001, 0.017]	0.009* (0.004) [0.001, 0.017]	0.009* (0.004) [0.001, 0.017]
Urban Location	0.054** (0.017) [0.022, 0.087]	0.054** (0.017) [0.021, 0.087]	0.054** (0.017) [0.021, 0.087]	0.053** (0.017) [0.020, 0.086]	0.053** (0.017) [0.020, 0.086]	0.053** (0.017) [0.020, 0.086]
Cognitive Ability (Z-Score)	0.170*** (0.010) [0.151, 0.190]	0.170*** (0.010) [0.150, 0.190]	0.170*** (0.010) [0.150, 0.189]	0.171*** (0.010) [0.151, 0.190]	0.171*** (0.010) [0.151, 0.190]	0.170*** (0.010) [0.151, 0.190]
Action Control: General Effort and Persistence Scale	0.011 (0.014) [-0.017, 0.038]	0.011 (0.014) [-0.016, 0.038]	0.010 (0.014) [-0.017, 0.038]	0.011 (0.014) [-0.016, 0.038]	0.011 (0.014) [-0.016, 0.038]	0.011 (0.014) [-0.016, 0.038]
Control Expectation Scale	0.017 (0.012) [-0.007, 0.041]	0.017 (0.012) [-0.007, 0.041]	0.017 (0.012) [-0.007, 0.041]	0.016 (0.012) [-0.008, 0.040]	0.016 (0.012) [-0.008, 0.040]	0.016 (0.012) [-0.008, 0.041]
Instrumental Motivation - Utility Interest - Scale	0.027* (0.011) [0.004, 0.049]	0.026* (0.012) [0.004, 0.049]	0.026* (0.011) [0.004, 0.049]	0.027* (0.011) [0.004, 0.049]	0.026* (0.011) [0.004, 0.049]	0.026* (0.011) [0.004, 0.049]
Non-Cognitive Ability (EXTERNAL)	0.116*** (0.023) [0.072, 0.160]	0.116*** (0.023) [0.071, 0.160]	0.117*** (0.023) [0.072, 0.161]	0.114*** (0.022) [0.070, 0.158]	0.113*** (0.022) [0.069, 0.157]	0.115*** (0.022) [0.071, 0.159]
Black - not Hispanic	0.106* (0.054) [0.001, 0.212]	0.128*** (0.034) [0.061, 0.195]	0.128*** (0.034) [0.062, 0.195]	0.107* (0.054) [0.001, 0.213]	0.137*** (0.034) [0.070, 0.204]	0.137*** (0.034) [0.070, 0.204]
American Indian or Alaska Native	-0.125 (0.098) [-0.316, 0.066]	-0.126 (0.098) [-0.317, 0.065]	-0.124 (0.098) [-0.315, 0.068]	-0.107 (0.096) [-0.295, 0.081]	-0.107 (0.096) [-0.294, 0.081]	-0.107 (0.097) [-0.296, 0.083]
Asian or Pacific Islander	0.026 (0.028) [-0.028, 0.080]	0.026 (0.028) [-0.028, 0.080]	0.027 (0.028) [-0.027, 0.081]	0.025 (0.028) [-0.029, 0.079]	0.026 (0.028) [-0.028, 0.080]	0.026 (0.028) [-0.028, 0.080]
Hispanic or Latino	-0.084** (0.028) [-0.139, -0.029]	-0.083** (0.028) [-0.138, -0.029]	-0.083** (0.028) [-0.138, -0.029]	-0.083** (0.028) [-0.138, -0.028]	-0.081** (0.028) [-0.135, -0.026]	-0.083** (0.028) [-0.138, -0.028]
Constant	-0.381*** (0.104) [-0.584, -0.178]	-0.381*** (0.104) [-0.585, -0.177]	-0.386*** (0.104) [-0.590, -0.182]	-0.363*** (0.103) [-0.565, -0.160]	-0.362*** (0.103) [-0.565, -0.159]	-0.369*** (0.104) [-0.573, -0.165]
Observations	2,640	2,640	2,640	2,640	2,640	2,640
Adjusted R-squared	0.305	0.305	0.305	0.307	0.307	0.307

**TABLE RBFO\_E2.3B: College Attendance**  
**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.136*					
	(0.065)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.090				
		(0.063)				
Incremental Effect of HS Athletics for Single-Parent Household			0.089**			
			(0.031)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.110		
				(0.082)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.128	
					(0.101)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.020
						(0.047)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.



## TABLE RBFO\_E2.4A: College Attendance

**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.100*** (0.015) [0.072 , 0.129]	
High School Sophomore BB Varsity Athlete			0.076 (0.047) [-0.016 , 0.167]
High School Sophomore Non BB Varsity Athlete			0.102*** (0.015) [0.073 , 0.130]
Single-Parent Household	-0.050** (0.016) [-0.082 , -0.019]	-0.044** (0.016) [-0.076 , -0.013]	-0.044** (0.016) [-0.076 , -0.013]
Family Income (\$10K)	0.008*** (0.002) [0.005 , 0.011]	0.007*** (0.002) [0.004 , 0.010]	0.007*** (0.002) [0.004 , 0.010]
Family Income Below Poverty Line	0.050 (0.027) [-0.003 , 0.103]	0.056* (0.027) [0.003 , 0.109]	0.056* (0.027) [0.003 , 0.109]
Number of Siblings	-0.018*** (0.005) [-0.027 , -0.008]	-0.017*** (0.005) [-0.026 , -0.008]	-0.017*** (0.005) [-0.026 , -0.008]
Father Education	0.015*** (0.003) [0.009 , 0.021]	0.015*** (0.003) [0.009 , 0.021]	0.015*** (0.003) [0.009 , 0.021]
Mother Education	0.016*** (0.004) [0.009 , 0.023]	0.015*** (0.004) [0.008 , 0.022]	0.015*** (0.004) [0.008 , 0.022]
Urban Location	0.091*** (0.015) [0.063 , 0.120]	0.094*** (0.015) [0.065 , 0.122]	0.093*** (0.015) [0.065 , 0.122]
Cognitive Ability (Z-Score)	0.190*** (0.009) [0.173 , 0.208]	0.189*** (0.009) [0.171 , 0.206]	0.189*** (0.009) [0.171 , 0.206]

## TABLE RBFO\_E2.4A: College Attendance

**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	0.007 (0.012) [-0.015 , 0.030]	0.010 (0.011) [-0.012 , 0.033]	0.010 (0.011) [-0.012 , 0.033]
Control Expectation Scale	0.022 (0.011) [-0.000 , 0.044]	0.017 (0.011) [-0.005 , 0.039]	0.017 (0.011) [-0.005 , 0.039]
Instrumental Motivation - Utility Interest - Scale	0.025** (0.009) [0.008 , 0.042]	0.023** (0.009) [0.006 , 0.041]	0.023** (0.009) [0.006 , 0.040]
Non-Cognitive Ability (EXTERNAL)	0.149*** (0.023) [0.104 , 0.194]	0.145*** (0.023) [0.101 , 0.189]	0.145*** (0.023) [0.101 , 0.189]
Black - not Hispanic	0.145*** (0.027) [0.093 , 0.197]	0.148*** (0.027) [0.095 , 0.200]	0.149*** (0.027) [0.096 , 0.201]
American Indian or Alaska Native	0.163 (0.087) [-0.007 , 0.334]	0.158 (0.088) [-0.013 , 0.330]	0.159 (0.087) [-0.013 , 0.331]
Asian or Pacific Islander	0.040 (0.025) [-0.010 , 0.089]	0.058* (0.025) [0.008 , 0.107]	0.058* (0.025) [0.008 , 0.107]
Hispanic or Latino	-0.009 (0.025) [-0.058 , 0.040]	0.000 (0.025) [-0.049 , 0.049]	0.000 (0.025) [-0.049 , 0.050]
Constant	-0.457*** (0.101) [-0.655 , -0.259]	-0.477*** (0.100) [-0.673 , -0.281]	-0.478*** (0.100) [-0.673 , -0.282]
Observations	3,410	3,410	3,410
Adjusted R-squared	0.314	0.324	0.324

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E2.4B: College Attendance**  
**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.112*** (0.015) [0.082, 0.142]	0.107*** (0.015) [0.077, 0.137]	0.102*** (0.017) [0.068, 0.136]			
HS Sophomore Athlete × Black	-0.121* (0.051) [-0.220, -0.022]					
HS Sophomore Athlete × Income Below Poverty Line		-0.064 (0.050) [-0.162, 0.034]				
HS Sophomore Athlete × Single-Parent Household			-0.004 (0.030) [-0.063, 0.055]			
High School Sophomore BB Varsity Athlete				0.099 (0.050) [-0.000, 0.198]	0.097 (0.050) [-0.000, 0.195]	0.017 (0.060) [-0.100, 0.134]
High School Sophomore Non BB Varsity Athlete				0.113*** (0.015) [0.083, 0.143]	0.107*** (0.015) [0.078, 0.137]	0.106*** (0.017) [0.072, 0.139]
HS Sophomore BB Athlete × Black				-0.150 (0.130) [-0.405, 0.106]		
HS Non BB Varsity Athlete × Black				-0.117* (0.052) [-0.218, -0.016]		
HS Sophomore BB Athlete × Income Below Poverty Line					-0.162 (0.140) [-0.436, 0.112]	
HS Non BB Varsity Athlete × Income Below Poverty Line					-0.054 (0.051) [-0.155, 0.047]	
HS Sophomore BB Athlete × Single-Parent Household						0.157 (0.094) [-0.027, 0.341]
HS Non BB Varsity Athlete × Single-Parent Household						-0.013 (0.030) [-0.072, 0.047]
Single-Parent Household	-0.044** (0.016) [-0.075, -0.013]	-0.044** (0.016) [-0.075, -0.013]	-0.042 (0.023) [-0.088, 0.004]	-0.044** (0.016) [-0.075, -0.013]	-0.044** (0.016) [-0.075, -0.013]	-0.042 (0.023) [-0.088, 0.003]
Family Income (\$10K)	0.007*** (0.002) [0.004, 0.010]	0.007*** (0.002) [0.004, 0.010]	0.007*** (0.002) [0.004, 0.010]	0.007*** (0.002) [0.004, 0.010]	0.007*** (0.002) [0.004, 0.010]	0.007*** (0.002) [0.004, 0.010]
Family Income Below Poverty Line	0.055* (0.027) [0.002, 0.108]	0.082* (0.033) [0.017, 0.147]	0.056* (0.027) [0.003, 0.109]	0.055* (0.027) [0.002, 0.108]	0.082* (0.033) [0.017, 0.146]	0.056* (0.027) [0.003, 0.108]
Number of Siblings	-0.017*** (0.005) [-0.026, -0.008]	-0.017*** (0.005) [-0.027, -0.008]	-0.017*** (0.005) [-0.026, -0.008]	-0.017*** (0.005) [-0.026, -0.008]	-0.017*** (0.005) [-0.027, -0.008]	-0.017*** (0.005) [-0.026, -0.008]

**TABLE RBFO\_E2.4B: College Attendance**  
**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.015*** (0.003) [0.009, 0.021]	0.015*** (0.003) [0.009, 0.021]	0.015*** (0.003) [0.009, 0.021]	0.015*** (0.003) [0.009, 0.021]	0.015*** (0.003) [0.009, 0.021]	0.015*** (0.003) [0.009, 0.021]
Mother Education	0.014*** (0.004) [0.007, 0.022]	0.015*** (0.004) [0.008, 0.022]	0.015*** (0.004) [0.007, 0.022]	0.014*** (0.004) [0.007, 0.022]	0.015*** (0.004) [0.008, 0.022]	0.014*** (0.004) [0.007, 0.022]
Urban Location	0.094*** (0.015) [0.065, 0.123]	0.094*** (0.015) [0.065, 0.122]	0.094*** (0.015) [0.065, 0.122]	0.094*** (0.015) [0.065, 0.123]	0.094*** (0.015) [0.065, 0.122]	0.093*** (0.015) [0.065, 0.122]
Cognitive Ability (Z-Score)	0.189*** (0.009) [0.172, 0.207]	0.189*** (0.009) [0.171, 0.206]	0.189*** (0.009) [0.171, 0.206]	0.189*** (0.009) [0.172, 0.207]	0.189*** (0.009) [0.171, 0.206]	0.189*** (0.009) [0.171, 0.206]
Action Control: General Effort and Persistence Scale	0.010 (0.011) [-0.012, 0.033]	0.010 (0.011) [-0.013, 0.032]	0.010 (0.011) [-0.012, 0.033]	0.010 (0.011) [-0.012, 0.033]	0.011 (0.011) [-0.012, 0.033]	0.010 (0.011) [-0.012, 0.033]
Control Expectation Scale	0.017 (0.011) [-0.005, 0.039]	0.017 (0.011) [-0.005, 0.039]	0.017 (0.011) [-0.005, 0.039]	0.017 (0.011) [-0.005, 0.039]	0.016 (0.011) [-0.006, 0.038]	0.017 (0.011) [-0.005, 0.039]
Instrumental Motivation - Utility Interest - Scale	0.023** (0.009) [0.005, 0.040]	0.024** (0.009) [0.007, 0.041]	0.023** (0.009) [0.006, 0.041]	0.022* (0.009) [0.005, 0.040]	0.023** (0.009) [0.006, 0.041]	0.023** (0.009) [0.006, 0.040]
Non-Cognitive Ability (EXTERNAL)	0.144*** (0.023) [0.099, 0.188]	0.144*** (0.023) [0.100, 0.188]	0.145*** (0.023) [0.101, 0.189]	0.144*** (0.023) [0.099, 0.188]	0.144*** (0.023) [0.099, 0.188]	0.145*** (0.023) [0.101, 0.190]
Black - not Hispanic	0.210*** (0.037) [0.138, 0.282]	0.149*** (0.027) [0.096, 0.201]	0.148*** (0.027) [0.096, 0.200]	0.210*** (0.037) [0.138, 0.282]	0.149*** (0.027) [0.097, 0.201]	0.147*** (0.027) [0.095, 0.199]
American Indian or Alaska Native	0.159 (0.088) [-0.013, 0.331]	0.160 (0.088) [-0.013, 0.333]	0.158 (0.088) [-0.013, 0.330]	0.159 (0.088) [-0.013, 0.331]	0.159 (0.088) [-0.014, 0.332]	0.155 (0.089) [-0.019, 0.329]
Asian or Pacific Islander	0.060* (0.025) [0.011, 0.110]	0.058* (0.025) [0.008, 0.107]	0.058* (0.025) [0.008, 0.107]	0.060* (0.025) [0.011, 0.110]	0.057* (0.025) [0.008, 0.107]	0.057* (0.025) [0.007, 0.106]
Hispanic or Latino	0.002 (0.025) [-0.048, 0.051]	-0.000 (0.025) [-0.049, 0.049]	-0.000 (0.025) [-0.049, 0.049]	0.002 (0.025) [-0.047, 0.051]	0.000 (0.025) [-0.049, 0.049]	-0.000 (0.025) [-0.049, 0.049]
Constant	-0.475*** (0.101) [-0.673, -0.278]	-0.478*** (0.100) [-0.674, -0.282]	-0.478*** (0.100) [-0.674, -0.282]	-0.476*** (0.101) [-0.673, -0.278]	-0.476*** (0.100) [-0.672, -0.280]	-0.477*** (0.100) [-0.674, -0.281]
Observations	3,410	3,410	3,410	3,410	3,410	3,410
Adjusted R-squared	0.325	0.324	0.324	0.325	0.324	0.324

**TABLE RBFO\_E2.4B: College Attendance**  
**Dependent Variable: Attended 4-Year PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.009 (0.048)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.043 (0.048)				
Incremental Effect of HS Athletics for Single-Parent Household			0.098*** (0.025)			
Incremental Effect of HS BB Athletics for Blacks				-0.051 (0.120)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					-0.065 (0.131)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.174* (0.072)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E2.5A: Division 1 College Attendance

**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.056** (0.017) [0.023 , 0.090]	
High School Sophomore BB/FB Varsity Athlete			0.024 (0.028) [-0.031 , 0.079]
High School Sophomore Non BB/FB Varsity Athlete			0.064*** (0.018) [0.028 , 0.099]
Single-Parent Household	-0.025 (0.019) [-0.062 , 0.012]	-0.024 (0.019) [-0.061 , 0.013]	-0.023 (0.019) [-0.060 , 0.014]
Family Income (\$10K)	0.007** (0.002) [0.003 , 0.011]	0.007** (0.002) [0.002 , 0.011]	0.006** (0.002) [0.002 , 0.011]
Family Income Below Poverty Line	0.011 (0.031) [-0.050 , 0.072]	0.009 (0.031) [-0.052 , 0.070]	0.008 (0.031) [-0.053 , 0.069]
Number of Siblings	0.000 (0.006) [-0.012 , 0.012]	0.000 (0.006) [-0.012 , 0.012]	0.000 (0.006) [-0.012 , 0.012]
Father Education	0.016*** (0.004) [0.008 , 0.023]	0.015*** (0.004) [0.007 , 0.023]	0.015*** (0.004) [0.007 , 0.023]
Mother Education	0.012** (0.004) [0.003 , 0.020]	0.011* (0.004) [0.002 , 0.020]	0.011* (0.004) [0.002 , 0.020]
Urban Location	0.035 (0.019) [-0.002 , 0.071]	0.034 (0.019) [-0.002 , 0.071]	0.034 (0.019) [-0.003 , 0.070]
Cognitive Ability (Z-Score)	0.132*** (0.010) [0.112 , 0.151]	0.132*** (0.010) [0.113 , 0.152]	0.132*** (0.010) [0.113 , 0.152]

**TABLE RBFO\_E2.5A: Division 1 College Attendance**

**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model  
Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	0.013 (0.015) [-0.016 , 0.042]	0.014 (0.015) [-0.015 , 0.043]	0.014 (0.015) [-0.015 , 0.043]
Control Expectation Scale	0.030* (0.013) [0.005 , 0.055]	0.030* (0.013) [0.005 , 0.055]	0.029* (0.013) [0.004 , 0.054]
Instrumental Motivation - Utility Interest - Scale	0.006 (0.013) [-0.019 , 0.031]	0.003 (0.013) [-0.022 , 0.028]	0.003 (0.013) [-0.022 , 0.027]
Non-Cognitive Ability (EXTERNAL)	0.056** (0.019) [0.020 , 0.093]	0.056** (0.019) [0.020 , 0.093]	0.055** (0.019) [0.019 , 0.092]
Black - not Hispanic	0.160*** (0.035) [0.091 , 0.229]	0.162*** (0.035) [0.093 , 0.231]	0.166*** (0.035) [0.097 , 0.235]
American Indian or Alaska Native	-0.108* (0.049) [-0.205 , -0.012]	-0.112* (0.050) [-0.211 , -0.014]	-0.104* (0.050) [-0.201 , -0.006]
Asian or Pacific Islander	0.074* (0.031) [0.014 , 0.134]	0.081** (0.030) [0.021 , 0.141]	0.080** (0.030) [0.021 , 0.140]
Hispanic or Latino	-0.026 (0.025) [-0.075 , 0.023]	-0.023 (0.025) [-0.072 , 0.027]	-0.022 (0.025) [-0.072 , 0.027]
Constant	-0.386*** (0.094) [-0.569 , -0.202]	-0.405*** (0.093) [-0.588 , -0.222]	-0.395*** (0.093) [-0.578 , -0.213]
Observations	2,640	2,640	2,640
Adjusted R-squared	0.189	0.192	0.192

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E2.5B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.058** (0.018) [0.023, 0.093]	0.055** (0.018) [0.019, 0.091]	0.083*** (0.021) [0.041, 0.124]			
HS Sophomore Athlete × Black	-0.023 (0.067) [-0.154, 0.108]					
HS Sophomore Athlete × Income Below Poverty Line		0.016 (0.054) [-0.090, 0.123]				
HS Sophomore Athlete × Single-Parent Household			-0.084* (0.035) [-0.153, -0.015]			
High School Sophomore BB/FB Varsity Athlete				0.021 (0.030) [-0.037, 0.080]	0.017 (0.029) [-0.041, 0.075]	0.075* (0.037) [0.003, 0.147]
High School Sophomore Non BB/FB Varsity Athlete				0.065*** (0.019) [0.029, 0.102]	0.063*** (0.019) [0.026, 0.101]	0.084*** (0.022) [0.041, 0.127]
HS Sophomore BB/FB Athlete × Black				0.012 (0.091) [-0.166, 0.191]		
HS Non BB/FB Varsity Athlete × Black				-0.030 (0.073) [-0.173, 0.114]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					0.083 (0.091) [-0.096, 0.262]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.000 (0.058) [-0.114, 0.113]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.146** (0.054) [-0.253, -0.039]
HS Non BB/FB Varsity Athlete × Single-Parent Household						-0.066 (0.037) [-0.139, 0.008]
Single-Parent Household	-0.024 (0.019) [-0.061, 0.013]	-0.024 (0.019) [-0.061, 0.013]	0.026 (0.027) [-0.027, 0.079]	-0.023 (0.019) [-0.061, 0.014]	-0.023 (0.019) [-0.061, 0.014]	0.025 (0.027) [-0.028, 0.078]
Family Income (\$10K)	0.007** (0.002) [0.002, 0.011]	0.007** (0.002) [0.002, 0.011]	0.006** (0.002) [0.002, 0.011]	0.006** (0.002) [0.002, 0.011]	0.006** (0.002) [0.002, 0.011]	0.006** (0.002) [0.002, 0.011]
Family Income Below Poverty Line	0.008 (0.031) [-0.052, 0.069]	0.000 (0.040) [-0.078, 0.078]	0.007 (0.031) [-0.053, 0.068]	0.008 (0.031) [-0.053, 0.069]	-0.002 (0.040) [-0.080, 0.075]	0.006 (0.031) [-0.055, 0.067]
Number of Siblings	0.000 (0.006) [-0.012, 0.012]	0.000 (0.006) [-0.012, 0.012]	0.000 (0.006) [-0.012, 0.012]	0.000 (0.006) [-0.012, 0.012]	0.000 (0.006) [-0.012, 0.012]	0.001 (0.006) [-0.011, 0.013]



**TABLE RBFO\_E2.5B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.015*** (0.004) [0.007, 0.023]	0.015*** (0.004) [0.007, 0.023]	0.015*** (0.004) [0.007, 0.023]	0.015*** (0.004) [0.007, 0.023]	0.015*** (0.004) [0.007, 0.023]	0.015*** (0.004) [0.007, 0.023]
Mother Education	0.011* (0.004) [0.003, 0.020]	0.011* (0.004) [0.003, 0.020]	0.011* (0.004) [0.002, 0.020]	0.011* (0.004) [0.002, 0.020]	0.011* (0.004) [0.002, 0.020]	0.011* (0.004) [0.002, 0.020]
Urban Location	0.034 (0.019) [-0.002, 0.071]	0.035 (0.019) [-0.002, 0.071]	0.034 (0.019) [-0.003, 0.070]	0.033 (0.019) [-0.003, 0.070]	0.034 (0.019) [-0.003, 0.070]	0.033 (0.019) [-0.004, 0.069]
Cognitive Ability (Z-Score)	0.132*** (0.010) [0.113, 0.152]	0.132*** (0.010) [0.112, 0.152]	0.132*** (0.010) [0.112, 0.151]	0.132*** (0.010) [0.113, 0.152]	0.132*** (0.010) [0.113, 0.152]	0.132*** (0.010) [0.112, 0.151]
Action Control: General Effort and Persistence Scale	0.014 (0.015) [-0.015, 0.043]	0.014 (0.015) [-0.015, 0.043]	0.013 (0.015) [-0.016, 0.042]	0.014 (0.015) [-0.015, 0.043]	0.014 (0.015) [-0.015, 0.043]	0.014 (0.015) [-0.016, 0.043]
Control Expectation Scale	0.030* (0.013) [0.005, 0.055]	0.030* (0.013) [0.005, 0.055]	0.030* (0.013) [0.005, 0.055]	0.029* (0.013) [0.004, 0.054]	0.029* (0.013) [0.004, 0.054]	0.030* (0.013) [0.005, 0.055]
Instrumental Motivation - Utility Interest - Scale	0.002 (0.013) [-0.023, 0.027]	0.003 (0.013) [-0.022, 0.028]	0.003 (0.013) [-0.022, 0.028]	0.002 (0.013) [-0.023, 0.027]	0.003 (0.013) [-0.022, 0.028]	0.003 (0.013) [-0.022, 0.028]
Non-Cognitive Ability (EXTERNAL)	0.056** (0.019) [0.020, 0.093]	0.057** (0.019) [0.020, 0.094]	0.058** (0.019) [0.022, 0.095]	0.055** (0.019) [0.019, 0.092]	0.055** (0.019) [0.019, 0.092]	0.058** (0.019) [0.021, 0.095]
Black - not Hispanic	0.176*** (0.053) [0.072, 0.280]	0.162*** (0.035) [0.093, 0.231]	0.162*** (0.035) [0.093, 0.231]	0.176*** (0.053) [0.072, 0.280]	0.167*** (0.035) [0.098, 0.236]	0.168*** (0.035) [0.099, 0.237]
American Indian or Alaska Native	-0.113* (0.050) [-0.211, -0.014]	-0.112* (0.050) [-0.210, -0.013]	-0.106* (0.050) [-0.203, -0.008]	-0.102* (0.050) [-0.200, -0.005]	-0.101* (0.050) [-0.199, -0.003]	-0.095 (0.051) [-0.195, 0.006]
Asian or Pacific Islander	0.081** (0.030) [0.022, 0.141]	0.081** (0.031) [0.021, 0.141]	0.081** (0.030) [0.021, 0.141]	0.081** (0.031) [0.021, 0.140]	0.082** (0.031) [0.022, 0.142]	0.081** (0.030) [0.021, 0.141]
Hispanic or Latino	-0.023 (0.025) [-0.072, 0.027]	-0.023 (0.025) [-0.072, 0.026]	-0.022 (0.025) [-0.071, 0.027]	-0.022 (0.025) [-0.071, 0.027]	-0.021 (0.025) [-0.071, 0.028]	-0.023 (0.025) [-0.072, 0.027]
Constant	-0.405*** (0.093) [-0.588, -0.222]	-0.406*** (0.094) [-0.589, -0.222]	-0.424*** (0.094) [-0.608, -0.240]	-0.395*** (0.093) [-0.578, -0.212]	-0.395*** (0.093) [-0.579, -0.212]	-0.416*** (0.094) [-0.600, -0.232]
Observations	2,640	2,640	2,640	2,640	2,640	2,640
Adjusted R-squared	0.191	0.191	0.193	0.191	0.191	0.193

**TABLE RBFO\_E2.5B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.035 (0.064)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.071 (0.051)				
Incremental Effect of HS Athletics for Single-Parent Household			-0.002 (0.029)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.034 (0.086)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.100 (0.086)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						-0.071 (0.040)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
 Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E2.6A: Division 1 College Attendance

**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.081*** (0.015) [0.051 , 0.110]	
High School Sophomore BB Varsity Athlete			0.072 (0.047) [-0.020 , 0.164]
High School Sophomore Non BB Varsity Athlete			0.081*** (0.015) [0.051 , 0.111]
Single-Parent Household	-0.019 (0.016) [-0.050 , 0.013]	-0.014 (0.016) [-0.045 , 0.017]	-0.014 (0.016) [-0.045 , 0.017]
Family Income (\$10K)	0.014*** (0.002) [0.010 , 0.018]	0.014*** (0.002) [0.010 , 0.018]	0.014*** (0.002) [0.010 , 0.018]
Family Income Below Poverty Line	0.074** (0.024) [0.026 , 0.121]	0.079** (0.024) [0.031 , 0.126]	0.079** (0.024) [0.031 , 0.126]
Number of Siblings	-0.004 (0.005) [-0.014 , 0.005]	-0.004 (0.005) [-0.013 , 0.005]	-0.004 (0.005) [-0.013 , 0.005]
Father Education	0.007* (0.003) [0.001 , 0.014]	0.007* (0.003) [0.000 , 0.014]	0.007* (0.003) [0.000 , 0.014]
Mother Education	0.007 (0.004) [-0.001 , 0.015]	0.006 (0.004) [-0.002 , 0.014]	0.006 (0.004) [-0.002 , 0.014]
Urban Location	0.107*** (0.017) [0.074 , 0.140]	0.109*** (0.017) [0.076 , 0.142]	0.109*** (0.017) [0.076 , 0.142]
Cognitive Ability (Z-Score)	0.139*** (0.009) [0.121 , 0.158]	0.138*** (0.009) [0.120 , 0.156]	0.138*** (0.009) [0.120 , 0.156]

**TABLE RBFO\_E2.6A: Division 1 College Attendance**

**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	-0.012 (0.013) [-0.038 , 0.014]	-0.009 (0.013) [-0.035 , 0.017]	-0.009 (0.013) [-0.035 , 0.017]
Control Expectation Scale	0.021 (0.012) [-0.003 , 0.045]	0.017 (0.012) [-0.007 , 0.041]	0.017 (0.012) [-0.007 , 0.041]
Instrumental Motivation - Utility Interest - Scale	0.033** (0.011) [0.012 , 0.054]	0.031** (0.011) [0.011 , 0.052]	0.031** (0.011) [0.011 , 0.052]
Non-Cognitive Ability (EXTERNAL)	0.087*** (0.021) [0.045 , 0.129]	0.084*** (0.021) [0.043 , 0.125]	0.084*** (0.021) [0.043 , 0.125]
Black - not Hispanic	0.147*** (0.028) [0.091 , 0.203]	0.150*** (0.029) [0.094 , 0.206]	0.150*** (0.029) [0.094 , 0.206]
American Indian or Alaska Native	-0.026 (0.082) [-0.186 , 0.134]	-0.030 (0.080) [-0.188 , 0.128]	-0.030 (0.081) [-0.188 , 0.128]
Asian or Pacific Islander	0.086** (0.030) [0.028 , 0.145]	0.100*** (0.030) [0.042 , 0.159]	0.101*** (0.030) [0.042 , 0.159]
Hispanic or Latino	-0.019 (0.023) [-0.064 , 0.026]	-0.012 (0.023) [-0.057 , 0.033]	-0.012 (0.023) [-0.057 , 0.033]
Constant	-0.369*** (0.099) [-0.564 , -0.174]	-0.385*** (0.098) [-0.577 , -0.193]	-0.385*** (0.098) [-0.577 , -0.193]
Observations	3,410	3,410	3,410
Adjusted R-squared	0.189	0.195	0.195

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E2.6B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.087*** (0.016) [0.056, 0.118]	0.082*** (0.016) [0.051, 0.114]	0.085*** (0.019) [0.047, 0.123]			
HS Sophomore Athlete × Black	-0.059 (0.053) [-0.163, 0.045]					
HS Sophomore Athlete × Income Below Poverty Line		-0.015 (0.045) [-0.104, 0.074]				
HS Sophomore Athlete × Single-Parent Household			-0.011 (0.030) [-0.069, 0.048]			
High School Sophomore BB Varsity Athlete				0.091 (0.051) [-0.009, 0.192]	0.071 (0.051) [-0.029, 0.171]	0.049 (0.060) [-0.069, 0.167]
High School Sophomore Non BB Varsity Athlete				0.086*** (0.016) [0.055, 0.118]	0.083*** (0.016) [0.051, 0.115]	0.086*** (0.020) [0.048, 0.125]
HS Sophomore BB Athlete × Black				-0.118 (0.124) [-0.362, 0.126]		
HS Non BB Varsity Athlete × Black				-0.052 (0.054) [-0.159, 0.055]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.011 (0.125) [-0.233, 0.256]	
HS Non BB Varsity Athlete × Income Below Poverty Line					-0.017 (0.047) [-0.109, 0.075]	
HS Sophomore BB Athlete × Single-Parent Household						0.062 (0.095) [-0.123, 0.248]
HS Non BB Varsity Athlete × Single-Parent Household						-0.015 (0.030) [-0.074, 0.045]
Single-Parent Household	-0.014 (0.016) [-0.045, 0.017]	-0.014 (0.016) [-0.045, 0.017]	-0.008 (0.021) [-0.050, 0.034]	-0.014 (0.016) [-0.045, 0.017]	-0.014 (0.016) [-0.045, 0.017]	-0.008 (0.021) [-0.050, 0.034]
Family Income (\$10K)	0.014*** (0.002) [0.010, 0.018]	0.014*** (0.002) [0.010, 0.018]	0.014*** (0.002) [0.010, 0.018]	0.014*** (0.002) [0.010, 0.018]	0.014*** (0.002) [0.010, 0.018]	0.014*** (0.002) [0.010, 0.018]
Family Income Below Poverty Line	0.078** (0.024) [0.031, 0.126]	0.085** (0.028) [0.029, 0.140]	0.078** (0.024) [0.031, 0.126]	0.078** (0.024) [0.030, 0.125]	0.085** (0.028) [0.029, 0.140]	0.078** (0.024) [0.031, 0.126]
Number of Siblings	-0.004 (0.005) [-0.013, 0.005]	-0.004 (0.005) [-0.013, 0.005]	-0.004 (0.005) [-0.013, 0.005]	-0.004 (0.005) [-0.013, 0.005]	-0.004 (0.005) [-0.013, 0.005]	-0.004 (0.005) [-0.013, 0.005]

**TABLE RBFO\_E2.6B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.007* (0.003) [0.000, 0.014]	0.007* (0.003) [0.000, 0.014]	0.007* (0.003) [0.000, 0.014]	0.007* (0.003) [0.000, 0.014]	0.007* (0.003) [0.000, 0.014]	0.007* (0.003) [0.000, 0.014]
Mother Education	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]
Urban Location	0.109*** (0.017) [0.076, 0.142]	0.109*** (0.017) [0.076, 0.142]	0.109*** (0.017) [0.076, 0.142]	0.109*** (0.017) [0.076, 0.142]	0.109*** (0.017) [0.076, 0.142]	0.109*** (0.017) [0.076, 0.142]
Cognitive Ability (Z-Score)	0.138*** (0.009) [0.120, 0.157]	0.138*** (0.009) [0.120, 0.156]	0.138*** (0.009) [0.120, 0.156]	0.138*** (0.009) [0.120, 0.156]	0.138*** (0.009) [0.120, 0.156]	0.138*** (0.009) [0.120, 0.156]
Action Control: General Effort and Persistence Scale	-0.009 (0.013) [-0.035, 0.017]	-0.009 (0.013) [-0.035, 0.017]	-0.009 (0.013) [-0.035, 0.017]	-0.009 (0.013) [-0.035, 0.017]	-0.009 (0.013) [-0.035, 0.016]	-0.009 (0.013) [-0.035, 0.017]
Control Expectation Scale	0.017 (0.012) [-0.007, 0.041]	0.017 (0.012) [-0.007, 0.041]	0.017 (0.012) [-0.007, 0.041]	0.017 (0.012) [-0.007, 0.041]	0.017 (0.012) [-0.007, 0.041]	0.017 (0.012) [-0.007, 0.041]
Instrumental Motivation - Utility Interest - Scale	0.031** (0.011) [0.010, 0.052]	0.031** (0.011) [0.011, 0.052]	0.031** (0.011) [0.011, 0.052]	0.031** (0.011) [0.010, 0.052]	0.031** (0.011) [0.011, 0.052]	0.031** (0.011) [0.010, 0.052]
Non-Cognitive Ability (EXTERNAL)	0.083*** (0.021) [0.042, 0.125]	0.083*** (0.021) [0.042, 0.125]	0.084*** (0.021) [0.043, 0.125]	0.083*** (0.021) [0.042, 0.124]	0.084*** (0.021) [0.042, 0.125]	0.084*** (0.021) [0.043, 0.125]
Black - not Hispanic	0.180*** (0.039) [0.104, 0.256]	0.150*** (0.029) [0.094, 0.206]	0.150*** (0.029) [0.094, 0.206]	0.180*** (0.039) [0.104, 0.256]	0.150*** (0.029) [0.094, 0.207]	0.149*** (0.029) [0.093, 0.206]
American Indian or Alaska Native	-0.030 (0.080) [-0.188, 0.128]	-0.030 (0.081) [-0.188, 0.128]	-0.030 (0.081) [-0.188, 0.128]	-0.030 (0.081) [-0.188, 0.128]	-0.029 (0.081) [-0.188, 0.129]	-0.032 (0.081) [-0.190, 0.127]
Asian or Pacific Islander	0.102*** (0.030) [0.043, 0.160]	0.100*** (0.030) [0.042, 0.159]	0.101*** (0.030) [0.042, 0.159]	0.102*** (0.030) [0.043, 0.160]	0.101*** (0.030) [0.042, 0.159]	0.100*** (0.030) [0.042, 0.159]
Hispanic or Latino	-0.011 (0.023) [-0.056, 0.034]	-0.012 (0.023) [-0.057, 0.033]	-0.012 (0.023) [-0.057, 0.033]	-0.011 (0.023) [-0.056, 0.034]	-0.012 (0.023) [-0.057, 0.033]	-0.012 (0.023) [-0.057, 0.033]
Constant	-0.384*** (0.098) [-0.577, -0.191]	-0.385*** (0.098) [-0.577, -0.193]	-0.387*** (0.098) [-0.579, -0.195]	-0.384*** (0.098) [-0.577, -0.192]	-0.386*** (0.098) [-0.578, -0.194]	-0.387*** (0.098) [-0.579, -0.195]
Observations	3,410	3,410	3,410	3,410	3,410	3,410
Adjusted R-squared	0.195	0.195	0.195	0.195	0.194	0.195

**TABLE RBFO\_E2.6B: Division 1 College Attendance**  
**Dependent Variable: Attended 4-Year NCAA Division 1 PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.028 (0.051)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.067 (0.043)				
Incremental Effect of HS Athletics for Single-Parent Household			0.074** (0.023)			
Incremental Effect of HS BB Athletics for Blacks				-0.027 (0.113)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.082 (0.114)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.111 (0.073)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E2.7A: FBS College Attendance

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.046** (0.015) [0.018 , 0.075]	
High School Sophomore BB/FB Varsity Athlete			0.047 (0.024) [-0.000 , 0.094]
High School Sophomore Non BB/FB Varsity Athlete			0.046** (0.015) [0.016 , 0.076]
Single-Parent Household	-0.016 (0.016) [-0.048 , 0.015]	-0.015 (0.016) [-0.047 , 0.016]	-0.015 (0.016) [-0.047 , 0.016]
Family Income (\$10K)	0.006** (0.002) [0.002 , 0.010]	0.006** (0.002) [0.002 , 0.010]	0.006** (0.002) [0.002 , 0.010]
Family Income Below Poverty Line	0.022 (0.023) [-0.023 , 0.066]	0.020 (0.023) [-0.025 , 0.065]	0.020 (0.023) [-0.025 , 0.065]
Number of Siblings	-0.002 (0.005) [-0.012 , 0.008]	-0.002 (0.005) [-0.012 , 0.007]	-0.002 (0.005) [-0.012 , 0.007]
Father Education	0.008* (0.003) [0.001 , 0.015]	0.008* (0.003) [0.001 , 0.014]	0.008* (0.003) [0.001 , 0.014]
Mother Education	0.009* (0.004) [0.001 , 0.017]	0.009* (0.004) [0.001 , 0.016]	0.009* (0.004) [0.001 , 0.016]
Urban Location	0.040* (0.017) [0.007 , 0.073]	0.040* (0.017) [0.007 , 0.072]	0.040* (0.017) [0.007 , 0.073]
Cognitive Ability (Z-Score)	0.093*** (0.009) [0.076 , 0.110]	0.093*** (0.009) [0.076 , 0.110]	0.093*** (0.009) [0.076 , 0.110]



## TABLE RBFO\_E2.7A: FBS College Attendance

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	0.003 (0.013) [-0.023 , 0.029]	0.004 (0.013) [-0.022 , 0.030]	0.004 (0.013) [-0.022 , 0.030]
Control Expectation Scale	0.017 (0.011) [-0.005 , 0.039]	0.017 (0.011) [-0.005 , 0.039]	0.017 (0.011) [-0.005 , 0.039]
Instrumental Motivation - Utility Interest - Scale	0.010 (0.011) [-0.012 , 0.032]	0.007 (0.011) [-0.015 , 0.029]	0.007 (0.011) [-0.015 , 0.029]
Non-Cognitive Ability (EXTERNAL)	0.018 (0.014) [-0.011 , 0.046]	0.018 (0.014) [-0.011 , 0.046]	0.018 (0.014) [-0.011 , 0.046]
Black - not Hispanic	0.024 (0.029) [-0.032 , 0.081]	0.026 (0.029) [-0.030 , 0.082]	0.026 (0.029) [-0.030 , 0.082]
American Indian or Alaska Native	-0.042 (0.034) [-0.110 , 0.025]	-0.046 (0.035) [-0.114 , 0.023]	-0.046 (0.035) [-0.115 , 0.023]
Asian or Pacific Islander	0.029 (0.028) [-0.026 , 0.083]	0.034 (0.028) [-0.020 , 0.089]	0.034 (0.028) [-0.020 , 0.089]
Hispanic or Latino	-0.019 (0.021) [-0.060 , 0.021]	-0.017 (0.020) [-0.057 , 0.023]	-0.017 (0.020) [-0.057 , 0.023]
Constant	-0.203** (0.076) [-0.351 , -0.054]	-0.218** (0.076) [-0.367 , -0.070]	-0.219** (0.076) [-0.367 , -0.070]
Observations	2,640	2,640	2,640
Adjusted R-squared	0.123	0.126	0.126

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E2.7B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.048** (0.015) [0.018, 0.078]	0.052*** (0.015) [0.022, 0.083]	0.066*** (0.018) [0.030, 0.101]			
HS Sophomore Athlete × Black	-0.018 (0.052) [-0.121, 0.084]					
HS Sophomore Athlete × Income Below Poverty Line		-0.077 (0.040) [-0.156, 0.002]				
HS Sophomore Athlete × Single-Parent Household			-0.062* (0.029) [-0.119, -0.005]			
High School Sophomore BB/FB Varsity Athlete				0.045 (0.026) [-0.005, 0.095]	0.051* (0.026) [0.001, 0.101]	0.081* (0.032) [0.017, 0.145]
High School Sophomore Non BB/FB Varsity Athlete				0.048** (0.016) [0.017, 0.080]	0.053** (0.016) [0.020, 0.085]	0.063*** (0.019) [0.026, 0.100]
HS Sophomore BB/FB Athlete × Black				0.007 (0.073) [-0.136, 0.150]		
HS Non BB/FB Varsity Athlete × Black				-0.031 (0.058) [-0.144, 0.082]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					-0.051 (0.064) [-0.175, 0.074]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.084* (0.042) [-0.167, -0.002]	
HS Sophomore BB/FB Athlete × Single-Parent Household						-0.098* (0.045) [-0.187, -0.009]
HS Non BB/FB Varsity Athlete × Single-Parent Household						-0.054 (0.031) [-0.114, 0.007]
Single-Parent Household	-0.016 (0.016) [-0.047, 0.016]	-0.016 (0.016) [-0.047, 0.016]	0.022 (0.022) [-0.023, 0.066]	-0.016 (0.016) [-0.047, 0.016]	-0.016 (0.016) [-0.047, 0.016]	0.022 (0.023) [-0.022, 0.066]
Family Income (\$10K)	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]
Family Income Below Poverty Line	0.020 (0.023) [-0.025, 0.064]	0.062 (0.034) [-0.003, 0.128]	0.019 (0.023) [-0.026, 0.063]	0.020 (0.023) [-0.025, 0.065]	0.062 (0.034) [-0.004, 0.128]	0.019 (0.023) [-0.026, 0.063]
Number of Siblings	-0.002 (0.005) [-0.012, 0.008]	-0.002 (0.005) [-0.012, 0.007]	-0.002 (0.005) [-0.012, 0.008]	-0.002 (0.005) [-0.012, 0.007]	-0.002 (0.005) [-0.012, 0.007]	-0.002 (0.005) [-0.012, 0.008]

**TABLE RBFO\_E2.7B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.008* (0.003) [0.001, 0.014]	0.008* (0.003) [0.001, 0.014]	0.007* (0.003) [0.001, 0.014]	0.008* (0.003) [0.001, 0.014]	0.008* (0.003) [0.001, 0.014]	0.007* (0.003) [0.001, 0.014]
Mother Education	0.009* (0.004) [0.001, 0.016]	0.008* (0.004) [0.001, 0.016]	0.009* (0.004) [0.001, 0.016]	0.009* (0.004) [0.001, 0.016]	0.008* (0.004) [0.001, 0.016]	0.009* (0.004) [0.001, 0.016]
Urban Location	0.040* (0.017) [0.007, 0.072]	0.039* (0.017) [0.007, 0.072]	0.040* (0.017) [0.007, 0.072]	0.039* (0.017) [0.007, 0.072]	0.039* (0.017) [0.007, 0.072]	0.039* (0.017) [0.007, 0.072]
Cognitive Ability (Z-Score)	0.093*** (0.009) [0.076, 0.110]	0.093*** (0.009) [0.077, 0.110]	0.093*** (0.009) [0.076, 0.110]	0.093*** (0.009) [0.076, 0.110]	0.093*** (0.009) [0.077, 0.110]	0.093*** (0.009) [0.076, 0.110]
Action Control: General Effort and Persistence Scale	0.004 (0.013) [-0.022, 0.030]	0.004 (0.013) [-0.022, 0.030]	0.003 (0.013) [-0.023, 0.029]	0.004 (0.013) [-0.022, 0.030]	0.004 (0.013) [-0.022, 0.030]	0.003 (0.013) [-0.023, 0.030]
Control Expectation Scale	0.017 (0.011) [-0.005, 0.039]	0.016 (0.011) [-0.005, 0.038]	0.017 (0.011) [-0.005, 0.039]	0.016 (0.011) [-0.005, 0.038]	0.017 (0.011) [-0.005, 0.038]	0.017 (0.011) [-0.005, 0.039]
Instrumental Motivation - Utility Interest - Scale	0.007 (0.011) [-0.016, 0.029]	0.007 (0.011) [-0.016, 0.029]	0.007 (0.011) [-0.015, 0.029]	0.007 (0.011) [-0.016, 0.029]	0.007 (0.011) [-0.016, 0.029]	0.007 (0.011) [-0.015, 0.029]
Non-Cognitive Ability (EXTERNAL)	0.018 (0.014) [-0.011, 0.046]	0.016 (0.015) [-0.013, 0.044]	0.019 (0.014) [-0.009, 0.047]	0.017 (0.014) [-0.011, 0.046]	0.016 (0.015) [-0.013, 0.044]	0.020 (0.014) [-0.009, 0.048]
Black - not Hispanic	0.037 (0.041) [-0.044, 0.118]	0.025 (0.029) [-0.031, 0.081]	0.026 (0.029) [-0.030, 0.082]	0.037 (0.041) [-0.044, 0.118]	0.025 (0.029) [-0.031, 0.082]	0.027 (0.029) [-0.029, 0.083]
American Indian or Alaska Native	-0.046 (0.035) [-0.114, 0.023]	-0.049 (0.034) [-0.117, 0.018]	-0.041 (0.035) [-0.109, 0.027]	-0.045 (0.035) [-0.114, 0.024]	-0.049 (0.035) [-0.117, 0.020]	-0.040 (0.036) [-0.110, 0.031]
Asian or Pacific Islander	0.035 (0.028) [-0.020, 0.089]	0.032 (0.028) [-0.022, 0.087]	0.035 (0.028) [-0.020, 0.089]	0.035 (0.028) [-0.020, 0.089]	0.032 (0.028) [-0.022, 0.087]	0.035 (0.028) [-0.019, 0.089]
Hispanic or Latino	-0.017 (0.020) [-0.057, 0.023]	-0.016 (0.020) [-0.056, 0.024]	-0.016 (0.020) [-0.056, 0.024]	-0.017 (0.020) [-0.057, 0.024]	-0.015 (0.021) [-0.055, 0.025]	-0.017 (0.020) [-0.057, 0.023]
Constant	-0.219** (0.076) [-0.367, -0.070]	-0.213** (0.076) [-0.363, -0.064]	-0.232** (0.076) [-0.382, -0.083]	-0.218** (0.076) [-0.367, -0.070]	-0.213** (0.076) [-0.362, -0.064]	-0.234** (0.076) [-0.383, -0.084]
Observations	2,640	2,640	2,640	2,640	2,640	2,640
Adjusted R-squared	0.126	0.126	0.127	0.125	0.126	0.127

**TABLE RBFO\_E2.7B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.029 (0.050)					
Incremental Effect of HS Athletics for Income Below Poverty Line		-0.025 (0.037)				
Incremental Effect of HS Athletics for Single-Parent Household			0.004 (0.023)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.052 (0.068)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.000 (0.058)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						-0.017 (0.032)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E2.8A: FBS College Attendance

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.048*** (0.013) [0.022 , 0.074]	
High School Sophomore BB Varsity Athlete			0.041 (0.039) [-0.035 , 0.116]
High School Sophomore Non BB Varsity Athlete			0.048*** (0.014) [0.022 , 0.075]
Single-Parent Household	-0.016 (0.014) [-0.044 , 0.012]	-0.013 (0.014) [-0.041 , 0.015]	-0.013 (0.014) [-0.041 , 0.015]
Family Income (\$10K)	0.009*** (0.002) [0.005 , 0.012]	0.008*** (0.002) [0.005 , 0.012]	0.008*** (0.002) [0.005 , 0.012]
Family Income Below Poverty Line	0.053* (0.020) [0.013 , 0.093]	0.056** (0.020) [0.015 , 0.096]	0.056** (0.020) [0.015 , 0.096]
Number of Siblings	0.002 (0.004) [-0.007 , 0.010]	0.002 (0.004) [-0.006 , 0.010]	0.002 (0.004) [-0.006 , 0.010]
Father Education	0.005 (0.003) [-0.001 , 0.011]	0.004 (0.003) [-0.001 , 0.010]	0.004 (0.003) [-0.001 , 0.010]
Mother Education	0.004 (0.004) [-0.003 , 0.011]	0.003 (0.004) [-0.004 , 0.010]	0.003 (0.004) [-0.004 , 0.010]
Urban Location	0.095*** (0.016) [0.065 , 0.126]	0.096*** (0.016) [0.066 , 0.127]	0.096*** (0.016) [0.066 , 0.127]
Cognitive Ability (Z-Score)	0.101*** (0.008) [0.084 , 0.117]	0.100*** (0.008) [0.084 , 0.116]	0.100*** (0.008) [0.084 , 0.116]

## TABLE RBFO\_E2.8A: FBS College Attendance

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	-0.020 (0.012) [-0.043 , 0.002]	-0.019 (0.012) [-0.042 , 0.004]	-0.019 (0.012) [-0.042 , 0.004]
Control Expectation Scale	0.020 (0.011) [-0.001 , 0.041]	0.017 (0.011) [-0.003 , 0.038]	0.017 (0.011) [-0.003 , 0.038]
Instrumental Motivation - Utility Interest - Scale	0.026** (0.010) [0.007 , 0.045]	0.025** (0.010) [0.006 , 0.044]	0.025** (0.010) [0.006 , 0.044]
Non-Cognitive Ability (EXTERNAL)	0.043* (0.019) [0.005 , 0.080]	0.041* (0.019) [0.004 , 0.078]	0.041* (0.019) [0.004 , 0.078]
Black - not Hispanic	0.021 (0.023) [-0.024 , 0.065]	0.022 (0.023) [-0.022 , 0.067]	0.023 (0.023) [-0.022 , 0.067]
American Indian or Alaska Native	-0.037 (0.066) [-0.165 , 0.092]	-0.039 (0.066) [-0.169 , 0.091]	-0.039 (0.066) [-0.169 , 0.091]
Asian or Pacific Islander	0.061* (0.028) [0.006 , 0.117]	0.070* (0.028) [0.014 , 0.126]	0.070* (0.028) [0.014 , 0.126]
Hispanic or Latino	0.000 (0.021) [-0.040 , 0.041]	0.004 (0.021) [-0.036 , 0.045]	0.004 (0.021) [-0.036 , 0.045]
Constant	-0.194* (0.090) [-0.370 , -0.017]	-0.203* (0.089) [-0.379 , -0.028]	-0.203* (0.089) [-0.379 , -0.028]
Observations	3,410	3,410	3,410
Adjusted R-squared	0.119	0.122	0.122

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E2.8B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.057*** (0.014) [0.029, 0.084]	0.047*** (0.014) [0.019, 0.075]	0.047** (0.018) [0.013, 0.082]			
HS Sophomore Athlete × Black	-0.093* (0.041) [-0.173, -0.012]					
HS Sophomore Athlete × Income Below Poverty Line		0.008 (0.038) [-0.066, 0.082]				
HS Sophomore Athlete × Single-Parent Household			0.001 (0.026) [-0.050, 0.051]			
High School Sophomore BB Varsity Athlete				0.056 (0.045) [-0.031, 0.143]	0.047 (0.043) [-0.038, 0.131]	0.049 (0.052) [-0.053, 0.151]
High School Sophomore Non BB Varsity Athlete				0.057*** (0.014) [0.029, 0.085]	0.047** (0.014) [0.019, 0.075]	0.047** (0.018) [0.013, 0.082]
HS Sophomore BB Athlete × Black				-0.102 (0.082) [-0.263, 0.058]		
HS Non BB Varsity Athlete × Black				-0.091* (0.042) [-0.174, -0.008]		
HS Sophomore BB Athlete × Income Below Poverty Line					-0.046 (0.079) [-0.201, 0.110]	
HS Non BB Varsity Athlete × Income Below Poverty Line					0.013 (0.039) [-0.064, 0.091]	
HS Sophomore BB Athlete × Single-Parent Household						-0.022 (0.075) [-0.170, 0.126]
HS Non BB Varsity Athlete × Single-Parent Household						0.002 (0.026) [-0.049, 0.054]
Single-Parent Household	-0.013 (0.014) [-0.040, 0.015]	-0.013 (0.014) [-0.041, 0.015]	-0.014 (0.018) [-0.049, 0.022]	-0.013 (0.014) [-0.040, 0.015]	-0.013 (0.014) [-0.041, 0.015]	-0.014 (0.018) [-0.049, 0.022]
Family Income (\$10K)	0.008*** (0.002) [0.005, 0.012]	0.008*** (0.002) [0.005, 0.012]	0.008*** (0.002) [0.005, 0.012]	0.008*** (0.002) [0.005, 0.012]	0.008*** (0.002) [0.005, 0.012]	0.008*** (0.002) [0.005, 0.012]
Family Income Below Poverty Line	0.055** (0.020) [0.015, 0.095]	0.052* (0.024) [0.006, 0.099]	0.056** (0.020) [0.015, 0.096]	0.055** (0.020) [0.015, 0.095]	0.052* (0.024) [0.006, 0.099]	0.056** (0.020) [0.016, 0.096]
Number of Siblings	0.002 (0.004) [-0.006, 0.010]	0.002 (0.004) [-0.006, 0.010]	0.002 (0.004) [-0.006, 0.010]	0.002 (0.004) [-0.006, 0.010]	0.002 (0.004) [-0.006, 0.010]	0.002 (0.004) [-0.006, 0.010]

**TABLE RBFO\_E2.8B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.004 (0.003) [-0.001, 0.010]	0.004 (0.003) [-0.001, 0.010]	0.004 (0.003) [-0.001, 0.010]	0.004 (0.003) [-0.001, 0.010]	0.004 (0.003) [-0.001, 0.010]	0.004 (0.003) [-0.001, 0.010]
Mother Education	0.003 (0.004) [-0.004, 0.010]	0.003 (0.004) [-0.004, 0.010]	0.003 (0.004) [-0.004, 0.010]	0.003 (0.004) [-0.004, 0.010]	0.003 (0.004) [-0.004, 0.010]	0.003 (0.004) [-0.004, 0.010]
Urban Location	0.097*** (0.016) [0.066, 0.127]	0.096*** (0.016) [0.066, 0.127]	0.096*** (0.016) [0.066, 0.127]	0.097*** (0.016) [0.066, 0.127]	0.096*** (0.016) [0.066, 0.127]	0.096*** (0.016) [0.066, 0.127]
Cognitive Ability (Z-Score)	0.100*** (0.008) [0.084, 0.116]	0.100*** (0.008) [0.084, 0.116]	0.100*** (0.008) [0.084, 0.116]	0.100*** (0.008) [0.084, 0.116]	0.100*** (0.008) [0.084, 0.116]	0.100*** (0.008) [0.084, 0.116]
Action Control: General Effort and Persistence Scale	-0.019 (0.012) [-0.042, 0.003]	-0.019 (0.012) [-0.042, 0.004]	-0.019 (0.012) [-0.042, 0.004]	-0.019 (0.012) [-0.042, 0.004]	-0.019 (0.012) [-0.041, 0.004]	-0.019 (0.012) [-0.042, 0.004]
Control Expectation Scale	0.017 (0.011) [-0.003, 0.038]	0.017 (0.011) [-0.003, 0.038]	0.017 (0.011) [-0.003, 0.038]	0.017 (0.011) [-0.003, 0.038]	0.017 (0.011) [-0.004, 0.038]	0.017 (0.011) [-0.003, 0.038]
Instrumental Motivation - Utility Interest - Scale	0.024* (0.010) [0.006, 0.043]	0.025** (0.010) [0.006, 0.044]	0.025** (0.010) [0.006, 0.044]	0.024* (0.010) [0.005, 0.043]	0.025** (0.010) [0.006, 0.044]	0.025** (0.010) [0.006, 0.044]
Non-Cognitive Ability (EXTERNAL)	0.040* (0.019) [0.002, 0.077]	0.041* (0.019) [0.004, 0.078]	0.041* (0.019) [0.004, 0.078]	0.040* (0.019) [0.002, 0.077]	0.041* (0.019) [0.004, 0.078]	0.041* (0.019) [0.004, 0.078]
Black - not Hispanic	0.070* (0.031) [0.010, 0.130]	0.022 (0.023) [-0.022, 0.067]	0.022 (0.023) [-0.022, 0.067]	0.070* (0.031) [0.009, 0.130]	0.022 (0.023) [-0.023, 0.067]	0.023 (0.023) [-0.022, 0.068]
American Indian or Alaska Native	-0.039 (0.066) [-0.169, 0.091]	-0.039 (0.066) [-0.169, 0.091]	-0.039 (0.066) [-0.169, 0.091]	-0.039 (0.066) [-0.169, 0.091]	-0.040 (0.066) [-0.170, 0.090]	-0.038 (0.066) [-0.168, 0.092]
Asian or Pacific Islander	0.072* (0.028) [0.016, 0.127]	0.070* (0.028) [0.014, 0.126]	0.070* (0.028) [0.014, 0.126]	0.072* (0.028) [0.016, 0.128]	0.070* (0.028) [0.014, 0.126]	0.070* (0.028) [0.014, 0.126]
Hispanic or Latino	0.006 (0.021) [-0.035, 0.046]	0.004 (0.021) [-0.036, 0.045]	0.004 (0.021) [-0.036, 0.045]	0.006 (0.021) [-0.035, 0.046]	0.004 (0.021) [-0.036, 0.045]	0.005 (0.021) [-0.036, 0.045]
Constant	-0.202* (0.090) [-0.379, -0.025]	-0.203* (0.089) [-0.379, -0.028]	-0.203* (0.089) [-0.378, -0.028]	-0.202* (0.090) [-0.379, -0.025]	-0.202* (0.090) [-0.378, -0.027]	-0.203* (0.089) [-0.378, -0.028]
Observations	3,410	3,410	3,410	3,410	3,410	3,410
Adjusted R-squared	0.123	0.122	0.122	0.123	0.122	0.122



**TABLE RBFO\_E2.8B: FBS College Attendance**

**Dependent Variable: Attended 4-Year NCAA FBS PSE Institution by 2006; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Graduating HS in 2004**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.036 (0.038)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.055 (0.035)				
Incremental Effect of HS Athletics for Single-Parent Household			0.048* (0.019)			
Incremental Effect of HS BB Athletics for Blacks				-0.046 (0.069)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.001 (0.067)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.027 (0.055)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E3.1A: College Graduation (MARGINS)**  
**Average of Marginal Effect (dy/dx)**  
 Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
 Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 2006

	(1)	(2)	(3)	(4)
	Some PSE	Associate's Degree	Bachelor's Degree	More than Bachelor's Degree
Single-Parent Household	0.013 (0.022) [-0.030, 0.056]	0.001 (0.013) [-0.025, 0.028]	-0.019 (0.024) [-0.065, 0.028]	0.004 (0.016) [-0.028, 0.036]
Family Income (\$10K)	-0.003 (0.002) [-0.008, 0.002]	-0.002 (0.002) [-0.005, 0.001]	0.002 (0.002) [-0.003, 0.006]	0.004** (0.001) [0.001, 0.006]
Family Income Below Poverty Line	-0.021 (0.040) [-0.100, 0.058]	-0.012 (0.021) [-0.054, 0.029]	-0.029 (0.051) [-0.129, 0.070]	0.063 (0.044) [-0.024, 0.149]
Number of Siblings	-0.001 (0.007) [-0.015, 0.012]	-0.000 (0.004) [-0.008, 0.008]	0.000 (0.007) [-0.014, 0.014]	0.001 (0.005) [-0.008, 0.010]
Father Education	-0.013** (0.004) [-0.022, -0.005]	-0.009** (0.003) [-0.015, -0.003]	0.013** (0.004) [0.005, 0.022]	0.010** (0.003) [0.004, 0.016]
Mother Education	-0.009 (0.005) [-0.019, 0.001]	-0.001 (0.003) [-0.008, 0.005]	0.015** (0.005) [0.005, 0.025]	-0.004 (0.003) [-0.011, 0.002]
Urban Location	0.005 (0.021) [-0.036, 0.045]	-0.004 (0.012) [-0.029, 0.020]	-0.003 (0.021) [-0.044, 0.038]	0.003 (0.013) [-0.023, 0.029]
Cognitive Ability (Z-Score)	-0.107*** (0.012) [-0.129, -0.084]	-0.028*** (0.007) [-0.042, -0.015]	0.083*** (0.013) [0.059, 0.108]	0.051*** (0.010) [0.032, 0.070]
Action Control: General Effort and Persistence Scale	-0.049** (0.016) [-0.081, -0.018]	0.006 (0.009) [-0.012, 0.024]	0.033* (0.016) [0.001, 0.065]	0.010 (0.011) [-0.012, 0.031]
Control Expectation Scale	0.022 (0.014) [-0.006, 0.050]	-0.008 (0.009) [-0.025, 0.009]	-0.033* (0.015) [-0.061, -0.004]	0.019 (0.010) [-0.001, 0.039]
Instrumental Motivation - Utility Interest - Scale	-0.011 (0.014) [-0.038, 0.015]	-0.018* (0.008) [-0.033, -0.003]	0.017 (0.014) [-0.010, 0.044]	0.012 (0.009) [-0.007, 0.031]
Non-Cognitive Ability (EXTERNAL)	-0.120*** (0.030) [-0.178, -0.062]	-0.007 (0.014) [-0.035, 0.021]	0.101** (0.037) [0.028, 0.175]	0.026 (0.028) [-0.028, 0.080]
Black - not Hispanic	-0.029 (0.038) [-0.102, 0.045]	-0.000 (0.022) [-0.043, 0.043]	0.040 (0.042) [-0.042, 0.122]	-0.012 (0.028) [-0.066, 0.043]
Asian or Pacific Islander	-0.024 (0.033) [-0.089, 0.042]	-0.040* (0.016) [-0.072, -0.008]	0.035 (0.034) [-0.031, 0.102]	0.028 (0.022) [-0.014, 0.070]
Hispanic or Latino	0.098** (0.034) [0.031, 0.164]	0.009 (0.019) [-0.028, 0.046]	-0.086* (0.035) [-0.155, -0.018]	-0.020 (0.024) [-0.067, 0.026]
Observations	2350	2350	2350	2350

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

**TABLE RBFO\_E3.1B: College Graduation (MARGINS)**  
**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 2006

	(1) Some PSE	(2) Associate's Degree	(3) Bachelor's Degree	(4) More than Bachelor's Degree
High School Sophomore Varsity Athlete	-0.094*** (0.020) [-0.134, -0.055]	-0.008 (0.012) [-0.033, 0.016]	0.081*** (0.020) [0.041, 0.121]	0.022 (0.013) [-0.004, 0.048]
Single-Parent Household	0.010 (0.022) [-0.033, 0.053]	0.001 (0.013) [-0.025, 0.027]	-0.016 (0.023) [-0.062, 0.030]	0.005 (0.016) [-0.027, 0.037]
Family Income (\$10K)	-0.002 (0.002) [-0.007, 0.002]	-0.002 (0.002) [-0.005, 0.001]	0.001 (0.002) [-0.004, 0.006]	0.003* (0.001) [0.001, 0.006]
Family Income Below Poverty Line	-0.022 (0.041) [-0.102, 0.058]	-0.013 (0.021) [-0.054, 0.029]	-0.028 (0.051) [-0.127, 0.072]	0.062 (0.044) [-0.024, 0.148]
Number of Siblings	-0.001 (0.007) [-0.014, 0.013]	0.000 (0.004) [-0.008, 0.008]	-0.000 (0.007) [-0.014, 0.014]	0.001 (0.005) [-0.009, 0.010]
Father Education	-0.013** (0.004) [-0.022, -0.004]	-0.009*** (0.003) [-0.015, -0.003]	0.013** (0.004) [0.004, 0.021]	0.010** (0.003) [0.004, 0.015]
Mother Education	-0.009 (0.005) [-0.019, 0.001]	-0.001 (0.003) [-0.008, 0.005]	0.015** (0.005) [0.005, 0.024]	-0.004 (0.003) [-0.011, 0.002]
Urban Location	0.005 (0.021) [-0.035, 0.045]	-0.004 (0.012) [-0.028, 0.021]	-0.004 (0.021) [-0.045, 0.037]	0.003 (0.013) [-0.023, 0.028]
Cognitive Ability (Z-Score)	-0.107*** (0.012) [-0.129, -0.084]	-0.028*** (0.007) [-0.042, -0.015]	0.084*** (0.013) [0.059, 0.108]	0.051*** (0.010) [0.032, 0.070]
Action Control: General Effort and Persistence Scale	-0.051** (0.016) [-0.082, -0.020]	0.006 (0.009) [-0.012, 0.024]	0.035* (0.016) [0.003, 0.067]	0.010 (0.011) [-0.012, 0.032]
Control Expectation Scale	0.022 (0.014) [-0.006, 0.050]	-0.008 (0.009) [-0.025, 0.009]	-0.033* (0.015) [-0.061, -0.004]	0.019 (0.010) [-0.001, 0.039]
Instrumental Motivation - Utility Interest - Scale	-0.004 (0.014) [-0.031, 0.022]	-0.017* (0.008) [-0.032, -0.002]	0.011 (0.014) [-0.016, 0.038]	0.011 (0.009) [-0.008, 0.029]
Non-Cognitive Ability (EXTERNAL)	-0.121*** (0.029) [-0.178, -0.064]	-0.008 (0.014) [-0.036, 0.021]	0.103** (0.038) [0.029, 0.176]	0.026 (0.028) [-0.028, 0.081]
Black - not Hispanic	-0.032 (0.037) [-0.104, 0.040]	-0.001 (0.022) [-0.044, 0.042]	0.043 (0.042) [-0.040, 0.125]	-0.010 (0.028) [-0.065, 0.046]
Asian or Pacific Islander	-0.037 (0.033) [-0.102, 0.028]	-0.041* (0.016) [-0.072, -0.009]	0.046 (0.034) [-0.020, 0.113]	0.031 (0.022) [-0.012, 0.074]
Hispanic or Latino	0.092** (0.034) [0.026, 0.158]	0.009 (0.019) [-0.028, 0.046]	-0.081* (0.035) [-0.150, -0.012]	-0.019 (0.024) [-0.066, 0.027]
Observations	2350	2350	2350	2350

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

**TABLE RBFO\_E3.1C: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 2006

	(1)	(2)	(3)	(4)
	Some PSE	Associate's Degree	Bachelor's Degree	More than Bachelor's Degree
High School Sophomore BB/FB Varsity Athlete	-0.042 (0.031) [-0.103, 0.019]	0.025 (0.021) [-0.017, 0.066]	0.011 (0.036) [-0.060, 0.082]	0.007 (0.026) [-0.044, 0.057]
High School Sophomore Non BB/FB Varsity Athlete	-0.102*** (0.021) [-0.143, -0.062]	-0.017 (0.013) [-0.042, 0.008]	0.094*** (0.021) [0.052, 0.136]	0.025 (0.014) [-0.003, 0.052]
Single-Parent Household	0.010 (0.022) [-0.033, 0.053]	0.001 (0.013) [-0.025, 0.027]	-0.016 (0.023) [-0.062, 0.030]	0.005 (0.016) [-0.027, 0.037]
Family Income (\$10K)	-0.002 (0.002) [-0.007, 0.002]	-0.002 (0.002) [-0.005, 0.001]	0.001 (0.002) [-0.004, 0.005]	0.003* (0.001) [0.001, 0.006]
Family Income Below Poverty Line	-0.020 (0.041) [-0.101, 0.060]	-0.012 (0.021) [-0.054, 0.030]	-0.029 (0.051) [-0.128, 0.070]	0.061 (0.044) [-0.025, 0.148]
Number of Siblings	-0.001 (0.007) [-0.015, 0.012]	-0.000 (0.004) [-0.008, 0.008]	0.000 (0.007) [-0.014, 0.015]	0.001 (0.005) [-0.008, 0.011]
Father Education	-0.013** (0.004) [-0.021, -0.004]	-0.009** (0.003) [-0.015, -0.003]	0.013** (0.004) [0.004, 0.021]	0.009** (0.003) [0.004, 0.015]
Mother Education	-0.009 (0.005) [-0.018, 0.001]	-0.001 (0.003) [-0.008, 0.006]	0.014** (0.005) [0.004, 0.024]	-0.004 (0.003) [-0.011, 0.002]
Urban Location	0.006 (0.021) [-0.035, 0.046]	-0.003 (0.012) [-0.028, 0.021]	-0.005 (0.021) [-0.046, 0.036]	0.002 (0.013) [-0.023, 0.028]
Cognitive Ability (Z-Score)	-0.107*** (0.012) [-0.130, -0.085]	-0.029*** (0.007) [-0.042, -0.015]	0.084*** (0.013) [0.060, 0.109]	0.052*** (0.010) [0.032, 0.071]
Action Control: General Effort and Persistence Scale	-0.051** (0.016) [-0.082, -0.020]	0.007 (0.009) [-0.011, 0.025]	0.034* (0.016) [0.002, 0.066]	0.010 (0.011) [-0.012, 0.032]
Control Expectation Scale	0.023 (0.014) [-0.005, 0.050]	-0.008 (0.009) [-0.025, 0.009]	-0.034* (0.015) [-0.062, -0.005]	0.019 (0.010) [-0.001, 0.039]
Instrumental Motivation - Utility Interest - Scale	-0.004 (0.014) [-0.031, 0.022]	-0.018* (0.008) [-0.033, -0.003]	0.012 (0.014) [-0.015, 0.039]	0.011 (0.009) [-0.008, 0.029]
Non-Cognitive Ability (EXTERNAL)	-0.118*** (0.029) [-0.175, -0.062]	-0.006 (0.014) [-0.034, 0.021]	0.100** (0.037) [0.027, 0.173]	0.025 (0.028) [-0.030, 0.080]
Black - not Hispanic	-0.039 (0.037) [-0.111, 0.034]	-0.006 (0.021) [-0.047, 0.035]	0.053 (0.042) [-0.030, 0.136]	-0.008 (0.029) [-0.065, 0.048]
Asian or Pacific Islander	-0.036 (0.033) [-0.101, 0.028]	-0.040* (0.016) [-0.072, -0.008]	0.046 (0.034) [-0.021, 0.112]	0.031 (0.022) [-0.012, 0.074]
Hispanic or Latino	0.089** (0.034) [0.024, 0.155]	0.008 (0.019) [-0.029, 0.045]	-0.078* (0.035) [-0.147, -0.010]	-0.019 (0.024) [-0.066, 0.028]
Observations	2350	2350	2350	2350

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

**TABLE RBFO\_E3.1D: College Graduation (MARGINS)**  
**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 2006

	(1) Some PSE	(2) Associate's Degree	(3) Bachelor's Degree	(4) More than Bachelor's Degree
College Varsity Athlete	-0.128*** (0.026) [-0.179, -0.076]	-0.055*** (0.014) [-0.083, -0.027]	0.131*** (0.029) [0.075, 0.187]	0.052** (0.019) [0.015, 0.089]
Single-Parent Household	0.012 (0.022) [-0.031, 0.055]	0.001 (0.013) [-0.025, 0.027]	-0.017 (0.023) [-0.063, 0.029]	0.005 (0.016) [-0.027, 0.037]
Family Income (\$10K)	-0.003 (0.002) [-0.007, 0.002]	-0.002 (0.002) [-0.005, 0.001]	0.001 (0.002) [-0.003, 0.006]	0.003** (0.001) [0.001, 0.006]
Family Income Below Poverty Line	-0.023 (0.040) [-0.102, 0.055]	-0.013 (0.021) [-0.054, 0.028]	-0.028 (0.051) [-0.127, 0.072]	0.064 (0.044) [-0.022, 0.150]
Number of Siblings	-0.002 (0.007) [-0.016, 0.012]	-0.001 (0.004) [-0.008, 0.007]	0.001 (0.007) [-0.013, 0.015]	0.001 (0.005) [-0.008, 0.010]
Father Education	-0.012** (0.004) [-0.021, -0.004]	-0.009*** (0.003) [-0.015, -0.003]	0.012** (0.004) [0.003, 0.021]	0.009** (0.003) [0.003, 0.015]
Mother Education	-0.009 (0.005) [-0.019, 0.001]	-0.001 (0.003) [-0.008, 0.006]	0.015** (0.005) [0.005, 0.024]	-0.005 (0.003) [-0.011, 0.002]
Urban Location	0.007 (0.020) [-0.033, 0.047]	-0.003 (0.012) [-0.028, 0.021]	-0.007 (0.021) [-0.047, 0.034]	0.003 (0.013) [-0.023, 0.029]
Cognitive Ability (Z-Score)	-0.106*** (0.012) [-0.128, -0.083]	-0.027*** (0.007) [-0.041, -0.014]	0.082*** (0.013) [0.057, 0.106]	0.051*** (0.010) [0.032, 0.070]
Action Control: General Effort and Persistence Scale	-0.047** (0.016) [-0.078, -0.017]	0.007 (0.009) [-0.011, 0.025]	0.032 (0.016) [-0.000, 0.064]	0.009 (0.011) [-0.013, 0.031]
Control Expectation Scale	0.022 (0.014) [-0.006, 0.050]	-0.008 (0.009) [-0.025, 0.009]	-0.032* (0.015) [-0.061, -0.004]	0.019 (0.010) [-0.001, 0.039]
Instrumental Motivation - Utility Interest - Scale	-0.009 (0.014) [-0.035, 0.018]	-0.017* (0.008) [-0.032, -0.002]	0.014 (0.014) [-0.013, 0.041]	0.011 (0.009) [-0.007, 0.030]
Non-Cognitive Ability (EXTERNAL)	-0.113*** (0.029) [-0.170, -0.055]	-0.004 (0.014) [-0.032, 0.024]	0.093* (0.037) [0.020, 0.165]	0.024 (0.028) [-0.030, 0.078]
Black - not Hispanic	-0.018 (0.038) [-0.092, 0.057]	0.006 (0.023) [-0.040, 0.051]	0.026 (0.041) [-0.054, 0.107]	-0.015 (0.027) [-0.068, 0.039]
Asian or Pacific Islander	-0.025 (0.033) [-0.089, 0.039]	-0.040* (0.016) [-0.072, -0.008]	0.036 (0.033) [-0.030, 0.101]	0.029 (0.022) [-0.013, 0.071]
Hispanic or Latino	0.096** (0.034) [0.030, 0.162]	0.009 (0.019) [-0.029, 0.046]	-0.085* (0.035) [-0.153, -0.017]	-0.020 (0.024) [-0.067, 0.027]
Observations	2350	2350	2350	2350

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

**TABLE RBFO\_E3.1E: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
Sex: Male (Alternative BB/FB Definition); Conditional on Attending Any PSE Institution by 2006

	(1)	(2)	(3)	(4)
	Some PSE	Associate's Degree	Bachelor's Degree	More than Bachelor's Degree
College Varsity and High School BB/FB Varsity Athlete	-0.049 (0.092) [-0.229, 0.130]	-0.055 (0.036) [-0.125, 0.015]	0.073 (0.101) [-0.125, 0.270]	0.032 (0.078) [-0.122, 0.185]
College Varsity Athlete Non BB/FB	-0.135*** (0.027) [-0.188, -0.081]	-0.054*** (0.015) [-0.083, -0.025]	0.136*** (0.030) [0.078, 0.194]	0.053** (0.019) [0.015, 0.091]
Single-Parent Household	0.012 (0.022) [-0.031, 0.055]	0.001 (0.013) [-0.025, 0.027]	-0.017 (0.023) [-0.063, 0.029]	0.005 (0.016) [-0.027, 0.037]
Family Income (\$10K)	-0.003 (0.002) [-0.007, 0.002]	-0.002 (0.002) [-0.005, 0.001]	0.001 (0.002) [-0.004, 0.006]	0.003* (0.001) [0.001, 0.006]
Family Income Below Poverty Line	-0.023 (0.040) [-0.101, 0.055]	-0.013 (0.021) [-0.054, 0.028]	-0.027 (0.051) [-0.127, 0.072]	0.064 (0.044) [-0.022, 0.150]
Number of Siblings	-0.002 (0.007) [-0.016, 0.012]	-0.001 (0.004) [-0.008, 0.007]	0.001 (0.007) [-0.013, 0.016]	0.001 (0.005) [-0.008, 0.011]
Father Education	-0.012** (0.004) [-0.021, -0.003]	-0.009** (0.003) [-0.015, -0.003]	0.012** (0.004) [0.003, 0.020]	0.009** (0.003) [0.003, 0.015]
Mother Education	-0.009 (0.005) [-0.019, 0.001]	-0.001 (0.003) [-0.008, 0.006]	0.015** (0.005) [0.005, 0.024]	-0.004 (0.003) [-0.011, 0.002]
Urban Location	0.006 (0.020) [-0.034, 0.046]	-0.003 (0.012) [-0.027, 0.021]	-0.006 (0.021) [-0.047, 0.035]	0.003 (0.013) [-0.023, 0.029]
Cognitive Ability (Z-Score)	-0.106*** (0.012) [-0.129, -0.083]	-0.027*** (0.007) [-0.041, -0.014]	0.082*** (0.013) [0.057, 0.106]	0.051*** (0.010) [0.032, 0.070]
Action Control: General Effort and Persistence Scale	-0.048** (0.016) [-0.079, -0.017]	0.007 (0.009) [-0.011, 0.024]	0.032 (0.016) [-0.000, 0.064]	0.009 (0.011) [-0.013, 0.031]
Control Expectation Scale	0.023 (0.014) [-0.005, 0.050]	-0.008 (0.009) [-0.025, 0.008]	-0.033* (0.015) [-0.061, -0.004]	0.019 (0.010) [-0.002, 0.039]
Instrumental Motivation - Utility Interest - Scale	-0.009 (0.014) [-0.035, 0.018]	-0.017* (0.008) [-0.032, -0.002]	0.014 (0.014) [-0.013, 0.041]	0.011 (0.009) [-0.007, 0.030]
Non-Cognitive Ability (EXTERNAL)	-0.112*** (0.030) [-0.170, -0.055]	-0.004 (0.014) [-0.032, 0.024]	0.092* (0.037) [0.020, 0.165]	0.024 (0.028) [-0.031, 0.078]
Black - not Hispanic	-0.019 (0.038) [-0.094, 0.055]	0.006 (0.023) [-0.040, 0.051]	0.028 (0.041) [-0.053, 0.109]	-0.014 (0.027) [-0.068, 0.040]
Asian or Pacific Islander	-0.025 (0.033) [-0.089, 0.040]	-0.040* (0.016) [-0.072, -0.008]	0.036 (0.033) [-0.030, 0.101]	0.029 (0.022) [-0.013, 0.071]
Hispanic or Latino	0.096** (0.034) [0.030, 0.162]	0.009 (0.019) [-0.029, 0.046]	-0.085* (0.035) [-0.153, -0.017]	-0.020 (0.024) [-0.067, 0.027]
Observations	2350	2350	2350	2350

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

**TABLE RBFO\_E3.2A: College Graduation (MARGINS)**  
**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
 Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 2006

	(1)	(2)	(3)	(4)
	Some PSE	Associate's Degree	Bachelor's Degree	More than Bachelor's Degree
Single-Parent Household	0.058*** (0.018) [0.024, 0.093]	-0.003 (0.012) [-0.025, 0.020]	-0.022 (0.020) [-0.061, 0.016]	-0.034* (0.014) [-0.061, -0.006]
Family Income (\$10K)	-0.005** (0.002) [-0.010, -0.001]	-0.004** (0.001) [-0.007, -0.001]	0.008*** (0.002) [0.004, 0.012]	0.002 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.006 (0.028) [-0.060, 0.049]	-0.031* (0.014) [-0.059, -0.003]	0.047 (0.037) [-0.026, 0.119]	-0.010 (0.032) [-0.074, 0.054]
Number of Siblings	0.015** (0.005) [0.004, 0.025]	0.005 (0.004) [-0.002, 0.012]	-0.003 (0.006) [-0.015, 0.010]	-0.017*** (0.005) [-0.027, -0.007]
Father Education	-0.008* (0.003) [-0.015, -0.001]	-0.005* (0.002) [-0.010, -0.001]	0.009* (0.004) [0.002, 0.017]	0.004 (0.003) [-0.001, 0.010]
Mother Education	-0.009* (0.004) [-0.017, -0.001]	-0.001 (0.003) [-0.007, 0.004]	0.003 (0.004) [-0.006, 0.011]	0.008* (0.003) [0.002, 0.014]
Urban Location	-0.035* (0.017) [-0.069, -0.001]	-0.028** (0.011) [-0.049, -0.007]	0.054** (0.019) [0.017, 0.092]	0.008 (0.014) [-0.018, 0.035]
Cognitive Ability (Z-Score)	-0.128*** (0.010) [-0.147, -0.109]	-0.025*** (0.006) [-0.037, -0.012]	0.085*** (0.011) [0.063, 0.108]	0.068*** (0.009) [0.050, 0.086]
Action Control: General Effort and Persistence Scale	-0.025 (0.014) [-0.052, 0.001]	0.004 (0.009) [-0.014, 0.022]	0.017 (0.015) [-0.012, 0.045]	0.005 (0.010) [-0.015, 0.025]
Control Expectation Scale	0.003 (0.013) [-0.022, 0.029]	-0.030*** (0.009) [-0.047, -0.013]	-0.003 (0.014) [-0.030, 0.024]	0.030** (0.010) [0.011, 0.049]
Instrumental Motivation - Utility Interest - Scale	-0.021* (0.011) [-0.042, -0.000]	0.010 (0.007) [-0.004, 0.025]	0.005 (0.011) [-0.017, 0.028]	0.006 (0.008) [-0.010, 0.021]
Non-Cognitive Ability (EXTERNAL)	-0.170*** (0.030) [-0.228, -0.111]	0.011 (0.018) [-0.023, 0.046]	0.038 (0.041) [-0.042, 0.119]	0.120** (0.038) [0.046, 0.194]
Black - not Hispanic	0.000 (0.028) [-0.054, 0.054]	-0.028 (0.016) [-0.058, 0.003]	-0.010 (0.035) [-0.078, 0.059]	0.037 (0.031) [-0.023, 0.097]
Asian or Pacific Islander	-0.023 (0.032) [-0.086, 0.039]	-0.036* (0.017) [-0.068, -0.003]	0.059 (0.033) [-0.007, 0.124]	0.000 (0.022) [-0.042, 0.043]
Hispanic or Latino	-0.014 (0.026) [-0.066, 0.037]	-0.006 (0.016) [-0.038, 0.026]	0.032 (0.031) [-0.030, 0.094]	-0.012 (0.024) [-0.059, 0.035]
Observations	3120	3120	3120	3120

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

**TABLE RBFO\_E3.2B: College Graduation (MARGINS)**  
**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 2006

	(1) Some PSE	(2) Associate's Degree	(3) Bachelor's Degree	(4) More than Bachelor's Degree
High School Sophomore Varsity Athlete	-0.049** (0.016) [-0.081, -0.017]	-0.016 (0.011) [-0.037, 0.006]	0.035* (0.018) [0.000, 0.069]	0.030* (0.013) [0.005, 0.055]
Single-Parent Household	0.055** (0.018) [0.021, 0.090]	-0.004 (0.011) [-0.026, 0.019]	-0.020 (0.020) [-0.058, 0.018]	-0.032* (0.014) [-0.060, -0.004]
Family Income (\$10K)	-0.005* (0.002) [-0.009, -0.001]	-0.004* (0.001) [-0.007, -0.001]	0.007*** (0.002) [0.003, 0.011]	0.002 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.009 (0.028) [-0.063, 0.045]	-0.032* (0.014) [-0.060, -0.004]	0.048 (0.037) [-0.025, 0.121]	-0.007 (0.033) [-0.072, 0.057]
Number of Siblings	0.014** (0.005) [0.004, 0.025]	0.005 (0.004) [-0.002, 0.012]	-0.003 (0.006) [-0.015, -0.010]	-0.017*** (0.005) [-0.027, -0.007]
Father Education	-0.008* (0.003) [-0.015, -0.001]	-0.005* (0.002) [-0.010, -0.001]	0.009* (0.004) [0.002, 0.017]	0.004 (0.003) [-0.001, 0.010]
Mother Education	-0.009* (0.004) [-0.017, -0.001]	-0.001 (0.003) [-0.007, 0.005]	0.002 (0.004) [-0.006, 0.011]	0.008* (0.003) [0.001, 0.014]
Urban Location	-0.036* (0.017) [-0.070, -0.002]	-0.029** (0.011) [-0.050, -0.008]	0.056** (0.019) [0.018, 0.093]	0.009 (0.014) [-0.018, 0.036]
Cognitive Ability (Z-Score)	-0.128*** (0.010) [-0.147, -0.109]	-0.025*** (0.006) [-0.038, -0.013]	0.085*** (0.011) [0.063, 0.108]	0.068*** (0.009) [0.050, 0.086]
Action Control: General Effort and Persistence Scale	-0.027* (0.014) [-0.054, -0.000]	0.003 (0.009) [-0.015, 0.021]	0.018 (0.015) [-0.010, 0.047]	0.005 (0.010) [-0.015, 0.025]
Control Expectation Scale	0.006 (0.013) [-0.019, 0.032]	-0.029** (0.009) [-0.047, -0.012]	-0.006 (0.014) [-0.033, 0.021]	0.029** (0.010) [0.010, 0.048]
Instrumental Motivation - Utility Interest - Scale	-0.021 (0.011) [-0.042, 0.000]	0.011 (0.007) [-0.004, 0.025]	0.005 (0.012) [-0.017, 0.028]	0.005 (0.008) [-0.011, 0.020]
Non-Cognitive Ability (EXTERNAL)	-0.168*** (0.030) [-0.227, -0.110]	0.012 (0.018) [-0.023, 0.047]	0.035 (0.041) [-0.045, 0.116]	0.121** (0.038) [0.046, 0.196]
Black - not Hispanic	-0.004 (0.028) [-0.058, 0.050]	-0.029 (0.015) [-0.059, 0.001]	-0.008 (0.035) [-0.076, 0.061]	0.041 (0.031) [-0.020, 0.101]
Asian or Pacific Islander	-0.034 (0.032) [-0.097, 0.029]	-0.039* (0.016) [-0.070, -0.007]	0.068* (0.034) [0.001, 0.134]	0.005 (0.022) [-0.039, 0.049]
Hispanic or Latino	-0.019 (0.026) [-0.070, 0.032]	-0.007 (0.016) [-0.039, 0.024]	0.036 (0.032) [-0.026, 0.098]	-0.009 (0.024) [-0.057, 0.038]
Observations	3120	3120	3120	3120

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.



**TABLE RBFO\_E3.2C: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 2006

	(1)	(2)	(3)	(4)
	Some PSE	Associate's Degree	Bachelor's Degree	More than Bachelor's Degree
High School Sophomore BB Varsity Athlete	-0.098* (0.047) [-0.190, -0.007]	0.023 (0.032) [-0.040, 0.085]	0.006 (0.056) [-0.105, 0.116]	0.070 (0.047) [-0.021, 0.162]
High School Sophomore Non BB Varsity Athlete	-0.046** (0.017) [-0.078, -0.013]	-0.018 (0.011) [-0.040, 0.003]	0.035* (0.018) [0.001, 0.070]	0.029* (0.013) [0.003, 0.054]
Single-Parent Household	0.055** (0.018) [0.021, 0.090]	-0.004 (0.011) [-0.026, 0.019]	-0.020 (0.020) [-0.058, 0.019]	-0.032* (0.014) [-0.060, -0.004]
Family Income (\$10K)	-0.005* (0.002) [-0.009, -0.001]	-0.004* (0.001) [-0.007, -0.001]	0.007*** (0.002) [0.003, 0.011]	0.002 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.009 (0.028) [-0.063, 0.045]	-0.032* (0.014) [-0.060, -0.005]	0.048 (0.037) [-0.025, 0.121]	-0.007 (0.033) [-0.072, 0.057]
Number of Siblings	0.014** (0.005) [0.004, 0.025]	0.005 (0.004) [-0.002, 0.012]	-0.003 (0.006) [-0.015, 0.010]	-0.017*** (0.005) [-0.027, -0.007]
Father Education	-0.008* (0.003) [-0.015, -0.001]	-0.005* (0.002) [-0.010, -0.001]	0.009* (0.004) [0.002, 0.017]	0.004 (0.003) [-0.001, 0.010]
Mother Education	-0.009* (0.004) [-0.017, -0.001]	-0.001 (0.003) [-0.007, 0.005]	0.002 (0.004) [-0.006, 0.011]	0.008* (0.003) [0.001, 0.014]
Urban Location	-0.036* (0.017) [-0.070, -0.002]	-0.029** (0.011) [-0.049, -0.008]	0.055** (0.019) [0.018, 0.093]	0.009 (0.014) [-0.017, 0.036]
Cognitive Ability (Z-Score)	-0.128*** (0.010) [-0.147, -0.109]	-0.025*** (0.006) [-0.038, -0.013]	0.085*** (0.011) [0.063, 0.108]	0.068*** (0.009) [0.050, 0.086]
Action Control: General Effort and Persistence Scale	-0.027* (0.014) [-0.054, -0.000]	0.003 (0.009) [-0.015, 0.021]	0.018 (0.015) [-0.010, 0.047]	0.005 (0.010) [-0.015, 0.025]
Control Expectation Scale	0.006 (0.013) [-0.019, 0.032]	-0.029*** (0.009) [-0.047, -0.012]	-0.006 (0.014) [-0.033, 0.021]	0.029** (0.010) [0.010, 0.048]
Instrumental Motivation - Utility Interest - Scale	-0.021* (0.011) [-0.042, -0.000]	0.011 (0.007) [-0.004, 0.026]	0.005 (0.012) [-0.017, 0.028]	0.005 (0.008) [-0.010, 0.021]
Non-Cognitive Ability (EXTERNAL)	-0.168*** (0.030) [-0.226, -0.110]	0.012 (0.018) [-0.023, 0.046]	0.036 (0.041) [-0.044, 0.116]	0.120** (0.038) [0.046, 0.195]
Black - not Hispanic	-0.002 (0.028) [-0.056, 0.052]	-0.030* (0.015) [-0.060, -0.000]	-0.008 (0.035) [-0.076, 0.061]	0.040 (0.031) [-0.021, 0.101]
Asian or Pacific Islander	-0.034 (0.032) [-0.097, 0.029]	-0.039* (0.016) [-0.070, -0.007]	0.068* (0.034) [0.001, 0.134]	0.005 (0.022) [-0.039, 0.048]
Hispanic or Latino	-0.018 (0.026) [-0.070, 0.033]	-0.008 (0.016) [-0.039, 0.024]	0.036 (0.032) [-0.026, 0.098]	-0.009 (0.024) [-0.057, 0.038]
Observations	3120	3120	3120	3120

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

**TABLE RBFO\_E3.2D: College Graduation (MARGINS)**  
**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 2006

	(1) Some PSE	(2) Associate's Degree	(3) Bachelor's Degree	(4) More than Bachelor's Degree
College Varsity Athlete	-0.046 (0.030) [-0.104, 0.013]	-0.065*** (0.013) [-0.091, -0.039]	0.114*** (0.031) [0.053, 0.174]	-0.003 (0.020) [-0.042, 0.035]
Single-Parent Household	0.057** (0.018) [0.023, 0.092]	-0.003 (0.011) [-0.026, 0.019]	-0.020 (0.019) [-0.059, 0.018]	-0.034* (0.014) [-0.061, -0.006]
Family Income (\$10K)	-0.005* (0.002) [-0.009, -0.001]	-0.003* (0.001) [-0.006, -0.001]	0.007*** (0.002) [0.003, 0.011]	0.002 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.006 (0.028) [-0.060, 0.048]	-0.031* (0.014) [-0.059, -0.003]	0.047 (0.037) [-0.025, 0.119]	-0.009 (0.032) [-0.073, 0.054]
Number of Siblings	0.015** (0.005) [0.004, 0.026]	0.006 (0.004) [-0.001, 0.013]	-0.003 (0.006) [-0.016, 0.009]	-0.017*** (0.005) [-0.027, -0.007]
Father Education	-0.008* (0.003) [-0.015, -0.001]	-0.005* (0.002) [-0.010, -0.000]	0.008* (0.004) [0.001, 0.016]	0.004 (0.003) [-0.001, 0.010]
Mother Education	-0.009* (0.004) [-0.017, -0.001]	-0.001 (0.003) [-0.007, 0.004]	0.002 (0.004) [-0.006, 0.011]	0.008* (0.003) [0.002, 0.014]
Urban Location	-0.034* (0.017) [-0.069, -0.000]	-0.027* (0.011) [-0.048, -0.006]	0.053** (0.019) [0.016, 0.090]	0.008 (0.014) [-0.018, 0.035]
Cognitive Ability (Z-Score)	-0.128*** (0.010) [-0.147, -0.109]	-0.025*** (0.006) [-0.037, -0.012]	0.085*** (0.011) [0.063, 0.107]	0.068*** (0.009) [0.050, 0.086]
Action Control: General Effort and Persistence Scale	-0.025 (0.014) [-0.052, 0.002]	0.004 (0.009) [-0.013, 0.022]	0.015 (0.015) [-0.014, 0.044]	0.005 (0.010) [-0.015, 0.025]
Control Expectation Scale	0.004 (0.013) [-0.022, 0.029]	-0.029*** (0.009) [-0.047, -0.012]	-0.004 (0.014) [-0.031, 0.023]	0.030** (0.010) [0.011, 0.049]
Instrumental Motivation - Utility Interest - Scale	-0.022* (0.011) [-0.043, -0.001]	0.010 (0.007) [-0.005, 0.024]	0.006 (0.011) [-0.016, 0.029]	0.006 (0.008) [-0.010, 0.021]
Non-Cognitive Ability (EXTERNAL)	-0.168*** (0.030) [-0.227, -0.109]	0.014 (0.018) [-0.020, 0.049]	0.034 (0.041) [-0.046, 0.114]	0.120** (0.038) [0.046, 0.194]
Black - not Hispanic	0.002 (0.028) [-0.052, 0.056]	-0.026 (0.016) [-0.057, 0.005]	-0.013 (0.035) [-0.081, 0.055]	0.037 (0.031) [-0.023, 0.097]
Asian or Pacific Islander	-0.026 (0.032) [-0.089, 0.036]	-0.038* (0.016) [-0.069, -0.007]	0.065* (0.033) [0.000, 0.130]	-0.001 (0.022) [-0.043, 0.042]
Hispanic or Latino	-0.015 (0.026) [-0.067, 0.036]	-0.007 (0.016) [-0.039, 0.024]	0.035 (0.031) [-0.026, 0.097]	-0.013 (0.024) [-0.059, 0.034]
Observations	3120	3120	3120	3120

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

**TABLE RBFO\_E3.2E: College Graduation (MARGINS)**

**Average of Marginal Effect (dy/dx)**

Dependent Variable: Post-Secondary Education Attained by 2012; Multinomial Logit  
Sex: Female (Alternative BB Definition); Conditional on Attending Any PSE Institution by 2006

	(1)	(2)	(3)	(4)
	Some PSE	Associate's Degree	Bachelor's Degree	More than Bachelor's Degree
College Varsity and High School BB Varsity Athlete	-0.225 (0.122) [-0.464, 0.013]	-0.093*** (0.005) [-0.103, -0.083]	0.382** (0.141) [0.106, 0.658]	-0.064 (0.076) [-0.213, 0.086]
College Varsity Athlete Non BB	-0.039 (0.030) [-0.098, 0.020]	-0.064*** (0.014) [-0.090, -0.037]	0.104*** (0.031) [0.044, 0.165]	-0.002 (0.020) [-0.041, 0.038]
Single-Parent Household	0.057** (0.018) [0.022, 0.091]	-0.003 (0.011) [-0.026, 0.019]	-0.020 (0.019) [-0.058, 0.018]	-0.033* (0.014) [-0.061, -0.005]
Family Income (\$10K)	-0.005* (0.002) [-0.010, -0.001]	-0.003* (0.001) [-0.006, -0.001]	0.007*** (0.002) [0.003, 0.011]	0.002 (0.001) [-0.001, 0.004]
Family Income Below Poverty Line	-0.007 (0.028) [-0.062, 0.047]	-0.031* (0.014) [-0.060, -0.003]	0.049 (0.037) [-0.023, 0.121]	-0.010 (0.032) [-0.074, 0.054]
Number of Siblings	0.015** (0.005) [0.004, 0.025]	0.006 (0.004) [-0.001, 0.013]	-0.003 (0.006) [-0.015, 0.009]	-0.017*** (0.005) [-0.027, -0.007]
Father Education	-0.007* (0.003) [-0.014, -0.001]	-0.005* (0.002) [-0.010, -0.000]	0.008* (0.004) [0.001, 0.015]	0.004 (0.003) [-0.001, 0.010]
Mother Education	-0.009* (0.004) [-0.018, -0.001]	-0.001 (0.003) [-0.007, 0.004]	0.003 (0.004) [-0.006, 0.011]	0.008* (0.003) [0.002, 0.014]
Urban Location	-0.035* (0.017) [-0.069, -0.001]	-0.027* (0.011) [-0.048, -0.006]	0.054** (0.019) [0.017, 0.091]	0.008 (0.014) [-0.019, 0.035]
Cognitive Ability (Z-Score)	-0.128*** (0.010) [-0.147, -0.109]	-0.025*** (0.006) [-0.037, -0.012]	0.085*** (0.011) [0.063, 0.108]	0.068*** (0.009) [0.050, 0.086]
Action Control: General Effort and Persistence Scale	-0.025 (0.014) [-0.051, 0.002]	0.004 (0.009) [-0.013, 0.022]	0.015 (0.015) [-0.014, 0.043]	0.005 (0.010) [-0.015, 0.025]
Control Expectation Scale	0.004 (0.013) [-0.021, 0.029]	-0.029*** (0.009) [-0.047, -0.012]	-0.005 (0.014) [-0.032, 0.022]	0.030** (0.010) [0.011, 0.049]
Instrumental Motivation - Utility Interest - Scale	-0.022* (0.011) [-0.043, -0.001]	0.010 (0.007) [-0.005, 0.024]	0.007 (0.011) [-0.015, 0.030]	0.006 (0.008) [-0.010, 0.021]
Non-Cognitive Ability (EXTERNAL)	-0.167*** (0.030) [-0.226, -0.108]	0.015 (0.018) [-0.020, 0.049]	0.033 (0.041) [-0.047, 0.113]	0.120** (0.038) [0.046, 0.194]
Black - not Hispanic	0.005 (0.028) [-0.050, 0.060]	-0.026 (0.016) [-0.057, 0.005]	-0.017 (0.035) [-0.085, 0.051]	0.038 (0.031) [-0.023, 0.098]
Asian or Pacific Islander	-0.026 (0.032) [-0.088, 0.036]	-0.038* (0.016) [-0.069, -0.007]	0.065* (0.033) [0.000, 0.130]	-0.001 (0.022) [-0.043, 0.042]
Hispanic or Latino	-0.015 (0.026) [-0.067, 0.036]	-0.007 (0.016) [-0.039, 0.024]	0.035 (0.031) [-0.026, 0.097]	-0.013 (0.024) [-0.060, 0.034]
Observations	3120	3120	3120	3120

Standard errors in parentheses. 95-percent confidence intervals in square brackets. Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or Black or Hispanic are the excluded category.

For discrete (binary) variables, the computed change (dy/dx) is for a discrete change in the value of the variable.

Source: ELS.

## TABLE RBFO\_E3.3A: College Graduation

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model  
 Index: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2001**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.080** (0.024) [0.033 , 0.128]	
High School Sophomore BB/FB Varsity Athlete			0.001 (0.042) [-0.082 , 0.084]
High School Sophomore Non BB/FB Varsity Athlete			0.094*** (0.025) [0.045 , 0.143]
Single-Parent Household	0.011 (0.028) [-0.044 , 0.065]	0.014 (0.028) [-0.040 , 0.068]	0.015 (0.028) [-0.039 , 0.069]
Family Income (\$10K)	0.002 (0.002) [-0.002 , 0.007]	0.002 (0.002) [-0.003 , 0.007]	0.002 (0.002) [-0.003 , 0.007]
Family Income Below Poverty Line	0.044 (0.058) [-0.069 , 0.158]	0.045 (0.059) [-0.070 , 0.160]	0.044 (0.058) [-0.070 , 0.159]
Number of Siblings	0.012 (0.008) [-0.004 , 0.029]	0.012 (0.008) [-0.004 , 0.029]	0.013 (0.008) [-0.004 , 0.029]
Father Education	0.017*** (0.005) [0.008 , 0.027]	0.017*** (0.005) [0.008 , 0.027]	0.017*** (0.005) [0.007 , 0.026]
Mother Education	0.014* (0.006) [0.003 , 0.025]	0.013* (0.006) [0.002 , 0.025]	0.013* (0.006) [0.002 , 0.024]
Urban Location	-0.032 (0.023) [-0.078 , 0.013]	-0.033 (0.023) [-0.079 , 0.012]	-0.034 (0.023) [-0.079 , 0.011]
Cognitive Ability (Z-Score)	0.072*** (0.016) [0.040 , 0.104]	0.075*** (0.016) [0.043 , 0.106]	0.076*** (0.016) [0.044 , 0.108]

## TABLE RBFO\_E3.3A: College Graduation

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Index: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2001**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	0.042* (0.018) [0.007, 0.078]	0.043* (0.018) [0.008, 0.079]	0.043* (0.018) [0.008, 0.079]
Control Expectation Scale	-0.019 (0.017) [-0.053, 0.015]	-0.018 (0.017) [-0.052, 0.015]	-0.018 (0.017) [-0.052, 0.015]
Instrumental Motivation - Utility Interest - Scale	0.019 (0.015) [-0.011, 0.048]	0.014 (0.015) [-0.016, 0.043]	0.014 (0.015) [-0.016, 0.043]
Non-Cognitive Ability (EXTERNAL)	0.080* (0.041) [0.001, 0.160]	0.082* (0.040) [0.004, 0.160]	0.079* (0.039) [0.002, 0.156]
Black - not Hispanic	-0.030 (0.049) [-0.125, 0.066]	-0.025 (0.049) [-0.120, 0.070]	-0.014 (0.049) [-0.110, 0.081]
American Indian or Alaska Native	-0.534*** (0.041) [-0.615, -0.453]	-0.566*** (0.042) [-0.649, -0.484]	-0.549*** (0.057) [-0.660, -0.437]
Asian or Pacific Islander	0.062 (0.033) [-0.003, 0.127]	0.071* (0.033) [0.005, 0.136]	0.069* (0.033) [0.004, 0.134]
Hispanic or Latino	-0.101* (0.047) [-0.193, -0.008]	-0.096* (0.047) [-0.188, -0.003]	-0.092* (0.047) [-0.183, -0.000]
Constant	-0.170 (0.180) [-0.522, 0.183]	-0.215 (0.177) [-0.562, 0.133]	-0.192 (0.175) [-0.536, 0.152]
Observations	1,650	1,650	1,650
Adjusted R-squared	0.075	0.081	0.084

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E3.3B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.081** (0.025) [0.031, 0.130]	0.092*** (0.025) [0.043, 0.141]	0.069* (0.028) [0.014, 0.124]			
HS Sophomore Athlete × Black	-0.005 (0.099) [-0.198, 0.189]					
HS Sophomore Athlete × Income Below Poverty Line		-0.236* (0.105) [-0.443, -0.030]				
HS Sophomore Athlete × Single-Parent Household			0.046 (0.056) [-0.064, 0.157]			
High School Sophomore BB/FB Varsity Athlete				0.006 (0.045) [-0.082, 0.095]	0.023 (0.044) [-0.063, 0.108]	-0.005 (0.050) [-0.102, 0.093]
High School Sophomore Non BB/FB Varsity Athlete				0.092*** (0.026) [0.042, 0.143]	0.103*** (0.026) [0.053, 0.154]	0.080** (0.028) [0.024, 0.136]
HS Sophomore BB/FB Athlete × Black				-0.030 (0.133) [-0.291, 0.231]		
HS Non BB/FB Varsity Athlete × Black				0.029 (0.105) [-0.176, 0.234]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					-0.368* (0.158) [-0.678, -0.057]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.189 (0.112) [-0.408, 0.030]	
HS Sophomore BB/FB Athlete × Single-Parent Household						0.022 (0.094) [-0.163, 0.207]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.057 (0.058) [-0.056, 0.171]
Single-Parent Household	0.014 (0.028) [-0.040, 0.068]	0.014 (0.027) [-0.040, 0.068]	-0.016 (0.047) [-0.109, 0.077]	0.015 (0.028) [-0.039, 0.069]	0.014 (0.028) [-0.040, 0.068]	-0.019 (0.048) [-0.112, 0.074]
Family Income (\$10K)	0.002 (0.002) [-0.003, 0.007]	0.002 (0.002) [-0.003, 0.007]	0.002 (0.002) [-0.003, 0.007]	0.002 (0.002) [-0.003, 0.007]	0.002 (0.002) [-0.003, 0.006]	0.002 (0.002) [-0.003, 0.007]
Family Income Below Poverty Line	0.045 (0.059) [-0.071, 0.160]	0.183* (0.079) [0.027, 0.339]	0.046 (0.059) [-0.070, 0.162]	0.045 (0.058) [-0.069, 0.159]	0.178* (0.080) [0.022, 0.334]	0.045 (0.059) [-0.069, 0.160]
Number of Siblings	0.012 (0.008) [-0.004, 0.029]	0.012 (0.008) [-0.004, 0.029]	0.012 (0.008) [-0.004, 0.029]	0.013 (0.008) [-0.003, 0.029]	0.013 (0.008) [-0.003, 0.030]	0.013 (0.008) [-0.003, 0.030]

**TABLE RBFO\_E3.3B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.017*** (0.005) [0.008, 0.027]	0.018*** (0.005) [0.008, 0.027]	0.017*** (0.005) [0.008, 0.027]	0.017*** (0.005) [0.007, 0.026]	0.017*** (0.005) [0.008, 0.027]	0.017*** (0.005) [0.007, 0.026]
Mother Education	0.013* (0.006) [0.002, 0.025]	0.013* (0.006) [0.002, 0.024]	0.013* (0.006) [0.002, 0.024]	0.013* (0.006) [0.002, 0.024]	0.013* (0.006) [0.002, 0.024]	0.013* (0.006) [0.002, 0.024]
Urban Location	-0.033 (0.023) [-0.079, 0.012]	-0.034 (0.023) [-0.079, 0.011]	-0.033 (0.023) [-0.078, 0.013]	-0.034 (0.023) [-0.079, 0.012]	-0.035 (0.023) [-0.080, 0.011]	-0.034 (0.023) [-0.079, 0.012]
Cognitive Ability (Z-Score)	0.074*** (0.016) [0.043, 0.106]	0.073*** (0.016) [0.042, 0.105]	0.075*** (0.016) [0.043, 0.107]	0.076*** (0.016) [0.044, 0.108]	0.075*** (0.016) [0.043, 0.106]	0.076*** (0.016) [0.045, 0.108]
Action Control: General Effort and Persistence Scale	0.043* (0.018) [0.008, 0.079]	0.043* (0.018) [0.007, 0.078]	0.044* (0.018) [0.009, 0.079]	0.043* (0.018) [0.008, 0.079]	0.043* (0.018) [0.007, 0.078]	0.044* (0.018) [0.009, 0.079]
Control Expectation Scale	-0.018 (0.017) [-0.052, 0.015]	-0.018 (0.017) [-0.051, 0.016]	-0.018 (0.017) [-0.052, 0.016]	-0.018 (0.017) [-0.052, 0.015]	-0.018 (0.017) [-0.052, 0.015]	-0.018 (0.017) [-0.052, 0.015]
Instrumental Motivation - Utility Interest - Scale	0.014 (0.015) [-0.016, 0.043]	0.013 (0.015) [-0.016, 0.043]	0.013 (0.015) [-0.016, 0.043]	0.014 (0.015) [-0.016, 0.044]	0.013 (0.015) [-0.017, 0.043]	0.013 (0.015) [-0.016, 0.043]
Non-Cognitive Ability (EXTERNAL)	0.082* (0.040) [0.004, 0.160]	0.085* (0.040) [0.006, 0.164]	0.081* (0.040) [0.003, 0.160]	0.079* (0.039) [0.002, 0.156]	0.082* (0.040) [0.004, 0.160]	0.079* (0.040) [0.001, 0.156]
Black - not Hispanic	-0.022 (0.083) [-0.185, 0.141]	-0.031 (0.048) [-0.126, 0.064]	-0.024 (0.049) [-0.120, 0.071]	-0.022 (0.083) [-0.186, 0.141]	-0.020 (0.049) [-0.115, 0.075]	-0.011 (0.049) [-0.107, 0.085]
American Indian or Alaska Native	-0.566*** (0.042) [-0.649, -0.484]	-0.573*** (0.042) [-0.655, -0.490]	-0.574*** (0.044) [-0.660, -0.487]	-0.550*** (0.056) [-0.660, -0.440]	-0.557*** (0.054) [-0.664, -0.451]	-0.550*** (0.065) [-0.677, -0.423]
Asian or Pacific Islander	0.071* (0.033) [0.005, 0.136]	0.066* (0.033) [0.001, 0.131]	0.071* (0.033) [0.005, 0.136]	0.069* (0.033) [0.004, 0.134]	0.063 (0.033) [-0.002, 0.128]	0.069* (0.033) [0.004, 0.134]
Hispanic or Latino	-0.096* (0.047) [-0.188, -0.003]	-0.095* (0.047) [-0.188, -0.003]	-0.097* (0.047) [-0.189, -0.005]	-0.092* (0.047) [-0.184, -0.001]	-0.094* (0.047) [-0.186, -0.002]	-0.093* (0.046) [-0.184, -0.002]
Constant	-0.215 (0.177) [-0.562, 0.133]	-0.238 (0.178) [-0.587, 0.111]	-0.204 (0.178) [-0.553, 0.145]	-0.193 (0.175) [-0.537, 0.151]	-0.215 (0.176) [-0.560, 0.131]	-0.181 (0.176) [-0.527, 0.164]
Observations	1,650	1,650	1,650	1,650	1,650	1,650
Adjusted R-squared	0.080	0.083	0.081	0.083	0.086	0.083

**TABLE RBFO\_E3.3B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.076 (0.095)					
Incremental Effect of HS Athletics for Income Below Poverty Line		-0.144 (0.102)				
Incremental Effect of HS Athletics for Single-Parent Household			0.115* (0.049)			
Incremental Effect of HS BB/FB Athletics for Blacks				-0.024 (0.125)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					-0.345* (0.152)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.017 (0.080)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
 Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.



**TABLE RBFO\_E3.3C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.067** (0.026) [0.017, 0.118]	0.063 (0.037) [-0.009, 0.135]	0.085** (0.030) [0.026, 0.143]			
College Varsity and High School BB/FB Varsity Athlete				-0.012 (0.099) [-0.206, 0.182]	0.059 (0.126) [-0.189, 0.306]	0.028 (0.105) [-0.178, 0.233]
College Varsity Athlete Non BB/FB				0.073** (0.026) [0.022, 0.125]	0.064 (0.037) [-0.009, 0.137]	0.090** (0.030) [0.030, 0.149]
College Varsity Athlete × Division 1		0.022 (0.051) [-0.078, 0.122]				
College Varsity Athlete × FBS			-0.064 (0.059) [-0.181, 0.052]			
College BB/FB Varsity Athlete × Division 1					-0.160 (0.200) [-0.553, 0.233]	
College BB/FB Varsity Athlete × FBS						-0.268 (0.293) [-0.843, 0.306]
College Varsity Athlete Non BB/FB × Division 1					0.035 (0.052) [-0.066, 0.136]	
College Varsity Athlete Non BB/FB × FBS						-0.057 (0.060) [-0.174, 0.060]
NCAA Division I		0.027 (0.026) [-0.025, 0.079]			0.027 (0.027) [-0.025, 0.079]	
NCAA FBS			0.032 (0.027) [-0.020, 0.084]			0.032 (0.027) [-0.020, 0.084]
Single-Parent Household	0.012 (0.028) [-0.043, 0.066]	0.012 (0.028) [-0.043, 0.066]	0.011 (0.028) [-0.044, 0.065]	0.012 (0.028) [-0.043, 0.066]	0.011 (0.028) [-0.044, 0.065]	0.010 (0.028) [-0.045, 0.065]
Family Income (\$10K)	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.003, 0.007]	0.002 (0.002) [-0.003, 0.007]
Family Income Below Poverty Line	0.046 (0.058) [-0.068, 0.159]	0.046 (0.058) [-0.067, 0.160]	0.048 (0.058) [-0.066, 0.161]	0.045 (0.058) [-0.068, 0.159]	0.046 (0.058) [-0.068, 0.159]	0.046 (0.058) [-0.067, 0.160]
Number of Siblings	0.012 (0.008) [-0.004, 0.029]	0.012 (0.008) [-0.004, 0.028]	0.013 (0.008) [-0.004, 0.029]	0.012 (0.008) [-0.004, 0.029]	0.012 (0.008) [-0.004, 0.029]	0.013 (0.008) [-0.004, 0.029]
Father Education	0.017*** (0.005) [0.007, 0.026]	0.017*** (0.005) [0.007, 0.026]	0.017*** (0.005) [0.007, 0.026]	0.017*** (0.005) [0.007, 0.026]	0.016*** (0.005) [0.007, 0.026]	0.016*** (0.005) [0.007, 0.026]

**TABLE RBFO\_E3.3C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.014* (0.006) [0.003, 0.025]	0.013* (0.006) [0.002, 0.025]	0.013* (0.006) [0.002, 0.025]	0.014* (0.006) [0.003, 0.025]	0.013* (0.006) [0.002, 0.024]	0.013* (0.006) [0.002, 0.025]
Urban Location	-0.032 (0.023) [-0.078, 0.013]	-0.033 (0.023) [-0.079, 0.013]	-0.034 (0.023) [-0.079, 0.012]	-0.031 (0.023) [-0.077, 0.014]	-0.032 (0.023) [-0.077, 0.014]	-0.032 (0.023) [-0.077, 0.014]
Cognitive Ability (Z-Score)	0.074*** (0.016) [0.042, 0.106]	0.072*** (0.016) [0.039, 0.104]	0.072*** (0.017) [0.039, 0.104]	0.075*** (0.016) [0.043, 0.107]	0.072*** (0.016) [0.040, 0.105]	0.073*** (0.017) [0.040, 0.105]
Action Control: General Effort and Persistence Scale	0.041* (0.018) [0.006, 0.077]	0.041* (0.018) [0.005, 0.076]	0.042* (0.018) [0.006, 0.078]	0.041* (0.018) [0.006, 0.077]	0.041* (0.018) [0.005, 0.077]	0.042* (0.018) [0.006, 0.078]
Control Expectation Scale	-0.019 (0.017) [-0.052, 0.015]	-0.020 (0.017) [-0.054, 0.013]	-0.020 (0.017) [-0.054, 0.014]	-0.020 (0.017) [-0.053, 0.014]	-0.022 (0.017) [-0.055, 0.012]	-0.021 (0.017) [-0.055, 0.013]
Instrumental Motivation - Utility Interest - Scale	0.018 (0.015) [-0.011, 0.047]	0.019 (0.015) [-0.011, 0.048]	0.018 (0.015) [-0.011, 0.048]	0.018 (0.015) [-0.011, 0.048]	0.019 (0.015) [-0.011, 0.048]	0.018 (0.015) [-0.011, 0.048]
Non-Cognitive Ability (EXTERNAL)	0.077 (0.041) [-0.002, 0.157]	0.075 (0.040) [-0.004, 0.154]	0.077 (0.041) [-0.003, 0.157]	0.077 (0.041) [-0.003, 0.157]	0.074 (0.040) [-0.006, 0.153]	0.076 (0.041) [-0.004, 0.156]
Black - not Hispanic	-0.035 (0.049) [-0.131, 0.060]	-0.042 (0.049) [-0.138, 0.054]	-0.037 (0.049) [-0.133, 0.059]	-0.033 (0.049) [-0.128, 0.062]	-0.041 (0.049) [-0.136, 0.055]	-0.035 (0.049) [-0.130, 0.060]
American Indian or Alaska Native	-0.545*** (0.043) [-0.629, -0.461]	-0.531*** (0.043) [-0.615, -0.447]	-0.541*** (0.044) [-0.627, -0.455]	-0.547*** (0.043) [-0.633, -0.462]	-0.532*** (0.043) [-0.616, -0.447]	-0.543*** (0.045) [-0.631, -0.455]
Asian or Pacific Islander	0.064 (0.033) [-0.001, 0.129]	0.061 (0.033) [-0.004, 0.126]	0.064 (0.033) [-0.001, 0.129]	0.064 (0.033) [-0.001, 0.128]	0.061 (0.033) [-0.004, 0.126]	0.063 (0.033) [-0.002, 0.128]
Hispanic or Latino	-0.103* (0.047) [-0.196, -0.010]	-0.103* (0.047) [-0.196, -0.011]	-0.101* (0.047) [-0.193, -0.008]	-0.103* (0.047) [-0.196, -0.010]	-0.102* (0.047) [-0.194, -0.010]	-0.098* (0.047) [-0.190, -0.005]
Constant	-0.158 (0.179) [-0.509, 0.193]	-0.150 (0.178) [-0.499, 0.200]	-0.158 (0.179) [-0.510, 0.194]	-0.154 (0.179) [-0.506, 0.197]	-0.136 (0.179) [-0.487, 0.215]	-0.151 (0.180) [-0.503, 0.201]
Observations	1,650	1,650	1,650	1,650	1,650	1,650
Adjusted R-squared	0.078	0.078	0.078	0.078	0.078	0.078

**TABLE RBFO\_E3.3C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.085* (0.036)				
Incremental Effect of College Athletics for FBS Students			0.021 (0.052)			
Incremental Effect of College BB/FB Athletics for Division I Students					-0.102 (0.155)	
Incremental Effect of College BB/FB Athletics for FBS Students						-0.241 (0.273)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E3.3D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**

**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.067* (0.027) [0.015, 0.119]	0.069** (0.026) [0.018, 0.120]	0.087** (0.029) [0.031, 0.143]			
College Varsity and High School BB/FB Varsity Athlete				0.058 (0.109) [-0.156, 0.271]	-0.003 (0.104) [-0.207, 0.200]	0.094 (0.116) [-0.133, 0.321]
College Varsity Athlete Non BB/FB				0.068* (0.027) [0.015, 0.121]	0.074** (0.027) [0.022, 0.126]	0.086** (0.029) [0.029, 0.143]
College Varsity Athlete × Black	0.002 (0.101) [-0.196, 0.199]					
College Varsity Athlete × Income Below Poverty Line		-0.041 (0.128) [-0.293, 0.210]				
College Varsity Athlete × Single-Parent Household			-0.085 (0.064) [-0.211, 0.041]			
College BB/FB Varsity Athlete × Black				-0.279 (0.232) [-0.734, 0.175]		
College BB/FB Varsity Athlete × Income Below Poverty Line					-0.110 (0.344) [-0.785, 0.565]	
College BB/FB Varsity Athlete × Single-Parent Household						-0.293 (0.203) [-0.690, 0.105]
College Varsity Athlete Non BB/FB × Black				0.061 (0.104) [-0.142, 0.265]		
College Varsity Athlete Non BB/FB × Income Below Poverty Line					-0.020 (0.133) [-0.280, 0.240]	
College Varsity Athlete Non BB/FB × Single-Parent Household						-0.059 (0.066) [-0.189, 0.071]
Single-Parent Household	0.012 (0.028) [-0.043, 0.066]	0.012 (0.028) [-0.043, 0.066]	0.029 (0.031) [-0.032, 0.090]	0.014 (0.028) [-0.040, 0.069]	0.012 (0.028) [-0.043, 0.066]	0.028 (0.031) [-0.032, 0.089]
Family Income (\$10K)	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.007]	0.002 (0.002) [-0.002, 0.007]
Family Income Below Poverty Line	0.046 (0.058) [-0.068, 0.159]	0.053 (0.064) [-0.073, 0.179]	0.045 (0.058) [-0.068, 0.158]	0.047 (0.057) [-0.065, 0.160]	0.052 (0.064) [-0.075, 0.178]	0.044 (0.057) [-0.068, 0.156]
Number of Siblings	0.012 (0.008) [-0.004, 0.029]	0.012 (0.008) [-0.004, 0.029]	0.013 (0.008) [-0.004, 0.029]	0.012 (0.008) [-0.004, 0.028]	0.012 (0.008) [-0.004, 0.029]	0.012 (0.008) [-0.004, 0.029]

**TABLE RBFO\_E3.3D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.017*** (0.005) [0.007, 0.026]	0.017*** (0.005) [0.007, 0.026]	0.017*** (0.005) [0.007, 0.026]	0.016*** (0.005) [0.007, 0.026]	0.017*** (0.005) [0.007, 0.026]	0.016*** (0.005) [0.007, 0.026]
Mother Education	0.014* (0.006) [0.003, 0.025]	0.014* (0.006) [0.003, 0.025]	0.014* (0.006) [0.003, 0.025]	0.014* (0.006) [0.003, 0.025]	0.014* (0.006) [0.003, 0.025]	0.014* (0.006) [0.003, 0.025]
Urban Location	-0.032 (0.023) [-0.078, 0.013]	-0.032 (0.023) [-0.078, 0.013]	-0.032 (0.023) [-0.077, 0.014]	-0.029 (0.023) [-0.075, 0.016]	-0.031 (0.023) [-0.077, 0.015]	-0.031 (0.023) [-0.076, 0.015]
Cognitive Ability (Z-Score)	0.074*** (0.016) [0.042, 0.106]	0.074*** (0.016) [0.042, 0.106]	0.075*** (0.016) [0.043, 0.106]	0.075*** (0.016) [0.043, 0.107]	0.075*** (0.016) [0.043, 0.107]	0.076*** (0.016) [0.044, 0.108]
Action Control: General Effort and Persistence Scale	0.041* (0.018) [0.005, 0.077]	0.041* (0.018) [0.005, 0.077]	0.040* (0.018) [0.005, 0.076]	0.041* (0.018) [0.005, 0.077]	0.041* (0.018) [0.005, 0.077]	0.040* (0.018) [0.004, 0.076]
Control Expectation Scale	-0.019 (0.017) [-0.052, 0.015]	-0.019 (0.017) [-0.052, 0.015]	-0.019 (0.017) [-0.052, 0.015]	-0.020 (0.017) [-0.054, 0.014]	-0.020 (0.017) [-0.053, 0.014]	-0.019 (0.017) [-0.053, 0.014]
Instrumental Motivation - Utility Interest - Scale	0.018 (0.015) [-0.011, 0.048]	0.018 (0.015) [-0.011, 0.048]	0.019 (0.015) [-0.011, 0.048]	0.018 (0.015) [-0.011, 0.048]	0.018 (0.015) [-0.011, 0.048]	0.019 (0.015) [-0.010, 0.049]
Non-Cognitive Ability (EXTERNAL)	0.077 (0.041) [-0.002, 0.157]	0.077 (0.041) [-0.002, 0.157]	0.079 (0.041) [-0.001, 0.159]	0.078 (0.041) [-0.002, 0.158]	0.077 (0.041) [-0.003, 0.157]	0.079 (0.041) [-0.001, 0.159]
Black - not Hispanic	-0.036 (0.058) [-0.149, 0.077]	-0.036 (0.049) [-0.131, 0.060]	-0.035 (0.049) [-0.130, 0.061]	-0.037 (0.058) [-0.150, 0.076]	-0.033 (0.049) [-0.128, 0.062]	-0.027 (0.049) [-0.123, 0.069]
American Indian or Alaska Native	-0.545*** (0.043) [-0.629, -0.461]	-0.545*** (0.043) [-0.629, -0.461]	-0.559*** (0.045) [-0.646, -0.472]	-0.547*** (0.043) [-0.632, -0.462]	-0.547*** (0.044) [-0.633, -0.462]	-0.558*** (0.045) [-0.646, -0.470]
Asian or Pacific Islander	0.064 (0.033) [-0.001, 0.129]	0.065 (0.033) [-0.000, 0.130]	0.065 (0.033) [-0.000, 0.130]	0.064 (0.033) [-0.001, 0.129]	0.064 (0.033) [-0.002, 0.129]	0.064 (0.033) [-0.001, 0.129]
Hispanic or Latino	-0.103* (0.047) [-0.196, -0.010]	-0.103* (0.047) [-0.196, -0.010]	-0.102* (0.047) [-0.195, -0.009]	-0.103* (0.047) [-0.196, -0.010]	-0.103* (0.047) [-0.196, -0.010]	-0.104* (0.047) [-0.197, -0.011]
Constant	-0.158 (0.179) [-0.509, 0.193]	-0.160 (0.179) [-0.511, 0.192]	-0.171 (0.180) [-0.523, 0.181]	-0.158 (0.179) [-0.510, 0.193]	-0.154 (0.179) [-0.506, 0.198]	-0.167 (0.180) [-0.521, 0.186]
Observations	1,650	1,650	1,650	1,650	1,650	1,650
Adjusted R-squared	0.078	0.078	0.079	0.078	0.077	0.079

**TABLE RBFO\_E3.3D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Male (Alternative BB/FB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.069 (0.097)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.028 (0.126)				
Incremental Effect of College Athletics for Single-Parent Household			0.002 (0.058)			
Incremental Effect of College BB/FB Athletics for Blacks				-0.221 (0.205)		
Incremental Effect of College BB/FB Athletics for Income Below Poverty Line					-0.113 (0.328)	
Incremental Effect of College BB/FB Athletics for Single-Parent Household						-0.199 (0.166)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E3.4A: College Graduation

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.032 (0.020) [-0.007, 0.072]	
High School Sophomore BB Varsity Athlete			0.076 (0.059) [-0.039, 0.191]
High School Sophomore Non BB Varsity Athlete			0.030 (0.020) [-0.009, 0.070]
Single-Parent Household	-0.056* (0.023) [-0.100, -0.011]	-0.054* (0.023) [-0.098, -0.010]	-0.055* (0.023) [-0.099, -0.010]
Family Income (\$10K)	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]
Family Income Below Poverty Line	-0.002 (0.043) [-0.085, 0.082]	0.002 (0.043) [-0.082, 0.085]	0.002 (0.043) [-0.082, 0.086]
Number of Siblings	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]
Father Education	0.007 (0.004) [-0.001, 0.014]	0.006 (0.004) [-0.001, 0.014]	0.006 (0.004) [-0.001, 0.014]
Mother Education	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]
Urban Location	0.036 (0.020) [-0.003, 0.074]	0.037 (0.020) [-0.002, 0.075]	0.037 (0.020) [-0.001, 0.076]
Cognitive Ability (Z-Score)	0.112*** (0.014) [0.085, 0.140]	0.113*** (0.014) [0.085, 0.140]	0.113*** (0.014) [0.086, 0.141]

## TABLE RBFO\_E3.4A: College Graduation

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model  
Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)
Action Control: General Effort and Persistence Scale	0.034* (0.015) [0.004 , 0.064]	0.035* (0.015) [0.005 , 0.065]	0.035* (0.015) [0.005 , 0.065]
Control Expectation Scale	0.004 (0.016) [-0.026 , 0.035]	0.003 (0.016) [-0.028 , 0.034]	0.003 (0.016) [-0.028 , 0.033]
Instrumental Motivation - Utility Interest - Scale	0.001 (0.011) [-0.021 , 0.023]	0.001 (0.011) [-0.022 , 0.023]	0.001 (0.011) [-0.022 , 0.023]
Non-Cognitive Ability (EXTERNAL)	0.089* (0.044) [0.002 , 0.176]	0.089* (0.044) [0.003 , 0.176]	0.089* (0.044) [0.002 , 0.175]
Black - not Hispanic	-0.047 (0.039) [-0.124 , 0.030]	-0.043 (0.040) [-0.120 , 0.035]	-0.044 (0.039) [-0.121 , 0.034]
American Indian or Alaska Native	-0.048 (0.130) [-0.302 , 0.206]	-0.048 (0.130) [-0.303 , 0.208]	-0.046 (0.130) [-0.302 , 0.209]
Asian or Pacific Islander	0.024 (0.033) [-0.040 , 0.088]	0.029 (0.033) [-0.036 , 0.094]	0.029 (0.033) [-0.036 , 0.093]
Hispanic or Latino	0.040 (0.036) [-0.031 , 0.110]	0.044 (0.036) [-0.027 , 0.114]	0.043 (0.036) [-0.028 , 0.114]
Constant	0.105 (0.187) [-0.260 , 0.471]	0.086 (0.186) [-0.279 , 0.452]	0.088 (0.186) [-0.278 , 0.453]
Observations	2,190	2,190	2,190
Adjusted R-squared	0.105	0.106	0.106

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.



**TABLE RBFO\_E3.4B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.046* (0.021) [0.005, 0.087]	0.038 (0.021) [-0.003, 0.078]	0.040 (0.023) [-0.005, 0.086]			
HS Sophomore Athlete × Black	-0.146* (0.072) [-0.287, -0.005]					
HS Sophomore Athlete × Income Below Poverty Line		-0.066 (0.078) [-0.218, 0.086]				
HS Sophomore Athlete × Single-Parent Household			-0.026 (0.044) [-0.113, 0.061]			
High School Sophomore BB Varsity Athlete				0.079 (0.060) [-0.039, 0.197]	0.086 (0.059) [-0.031, 0.202]	0.101 (0.071) [-0.038, 0.240]
High School Sophomore Non BB Varsity Athlete				0.045* (0.021) [0.003, 0.086]	0.035 (0.021) [-0.006, 0.076]	0.038 (0.023) [-0.008, 0.084]
HS Sophomore BB Athlete × Black				-0.034 (0.201) [-0.427, 0.360]		
HS Non BB Varsity Athlete × Black				-0.160* (0.073) [-0.303, -0.017]		
HS Sophomore BB Athlete × Income Below Poverty Line					-0.120 (0.285) [-0.678, 0.438]	
HS Non BB Varsity Athlete × Income Below Poverty Line					-0.063 (0.078) [-0.217, 0.090]	
HS Sophomore BB Athlete × Single-Parent Household						-0.068 (0.124) [-0.311, 0.176]
HS Non BB Varsity Athlete × Single-Parent Household						-0.026 (0.045) [-0.113, 0.062]
Single-Parent Household	-0.054* (0.023) [-0.098, -0.010]	-0.054* (0.023) [-0.098, -0.010]	-0.038 (0.037) [-0.110, 0.034]	-0.054* (0.023) [-0.099, -0.010]	-0.054* (0.023) [-0.099, -0.010]	-0.038 (0.037) [-0.110, 0.034]
Family Income (\$10K)	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]
Family Income Below Poverty Line	-0.001 (0.043) [-0.085, 0.083]	0.031 (0.056) [-0.078, 0.140]	0.001 (0.043) [-0.083, 0.085]	0.001 (0.043) [-0.083, 0.085]	0.032 (0.056) [-0.077, 0.141]	0.001 (0.043) [-0.083, 0.085]
Number of Siblings	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]

**TABLE RBFO\_E3.4B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.007 (0.004) [-0.001, 0.014]	0.006 (0.004) [-0.001, 0.014]	0.007 (0.004) [-0.001, 0.014]	0.006 (0.004) [-0.001, 0.014]	0.006 (0.004) [-0.001, 0.014]	0.006 (0.004) [-0.001, 0.014]
Mother Education	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]
Urban Location	0.038 (0.020) [-0.001, 0.076]	0.037 (0.020) [-0.001, 0.076]	0.037 (0.020) [-0.002, 0.075]	0.038 (0.020) [-0.000, 0.077]	0.037 (0.020) [-0.001, 0.076]	0.037 (0.020) [-0.002, 0.075]
Cognitive Ability (Z-Score)	0.114*** (0.014) [0.086, 0.141]	0.113*** (0.014) [0.085, 0.140]	0.113*** (0.014) [0.085, 0.141]	0.115*** (0.014) [0.087, 0.142]	0.113*** (0.014) [0.085, 0.141]	0.114*** (0.014) [0.086, 0.141]
Action Control: General Effort and Persistence Scale	0.034* (0.015) [0.004, 0.064]	0.035* (0.015) [0.005, 0.065]	0.035* (0.015) [0.005, 0.065]	0.035* (0.015) [0.005, 0.065]	0.035* (0.015) [0.005, 0.065]	0.035* (0.015) [0.005, 0.065]
Control Expectation Scale	0.003 (0.016) [-0.027, 0.034]	0.003 (0.016) [-0.028, 0.033]	0.003 (0.016) [-0.028, 0.034]	0.003 (0.016) [-0.028, 0.033]	0.002 (0.016) [-0.028, 0.033]	0.003 (0.016) [-0.028, 0.033]
Instrumental Motivation - Utility Interest - Scale	-0.000 (0.011) [-0.023, 0.022]	0.001 (0.011) [-0.022, 0.023]	0.001 (0.011) [-0.022, 0.023]	0.000 (0.011) [-0.022, 0.023]	0.001 (0.011) [-0.021, 0.023]	0.001 (0.011) [-0.021, 0.023]
Non-Cognitive Ability (EXTERNAL)	0.085 (0.045) [-0.003, 0.174]	0.089* (0.044) [0.002, 0.176]	0.089* (0.044) [0.003, 0.176]	0.084 (0.045) [-0.004, 0.173]	0.089* (0.044) [0.002, 0.175]	0.089* (0.044) [0.003, 0.176]
Black - not Hispanic	0.035 (0.053) [-0.069, 0.138]	-0.043 (0.040) [-0.121, 0.035]	-0.043 (0.040) [-0.120, 0.035]	0.035 (0.053) [-0.068, 0.139]	-0.044 (0.040) [-0.122, 0.033]	-0.044 (0.039) [-0.121, 0.034]
American Indian or Alaska Native	-0.046 (0.131) [-0.303, 0.210]	-0.045 (0.130) [-0.299, 0.210]	-0.047 (0.130) [-0.301, 0.207]	-0.046 (0.131) [-0.302, 0.211]	-0.044 (0.130) [-0.298, 0.210]	-0.046 (0.130) [-0.300, 0.208]
Asian or Pacific Islander	0.032 (0.033) [-0.033, 0.097]	0.029 (0.033) [-0.036, 0.094]	0.029 (0.033) [-0.035, 0.094]	0.031 (0.033) [-0.034, 0.096]	0.029 (0.033) [-0.036, 0.094]	0.030 (0.033) [-0.035, 0.095]
Hispanic or Latino	0.046 (0.036) [-0.025, 0.117]	0.043 (0.036) [-0.028, 0.113]	0.044 (0.036) [-0.027, 0.115]	0.046 (0.036) [-0.025, 0.117]	0.042 (0.036) [-0.029, 0.113]	0.044 (0.036) [-0.027, 0.115]
Constant	0.093 (0.190) [-0.279, 0.464]	0.082 (0.186) [-0.283, 0.448]	0.080 (0.186) [-0.285, 0.445]	0.097 (0.190) [-0.275, 0.470]	0.083 (0.186) [-0.282, 0.449]	0.080 (0.186) [-0.286, 0.445]
Observations	2,190	2,190	2,190	2,190	2,190	2,190
Adjusted R-squared	0.107	0.106	0.106	0.107	0.105	0.105

**TABLE RBFO\_E3.4B: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.100 (0.069)					
Incremental Effect of HS Athletics for Income Below Poverty Line		-0.028 (0.075)				
Incremental Effect of HS Athletics for Single-Parent Household			0.014 (0.038)			
Incremental Effect of HS BB Athletics for Blacks				0.045 (0.192)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					-0.034 (0.279)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.034 (0.102)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.  
 Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E3.4C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.019 (0.027) [-0.033, 0.071]	0.038 (0.037) [-0.034, 0.110]	0.028 (0.031) [-0.033, 0.090]			
College Varsity and High School BB Varsity Athlete				0.238* (0.118) [0.007, 0.470]	0.033 (0.190) [-0.340, 0.405]	0.130 (0.182) [-0.227, 0.487]
College Varsity Athlete Non BB				0.012 (0.027) [-0.041, 0.065]	0.038 (0.037) [-0.035, 0.111]	0.026 (0.032) [-0.037, 0.088]
College Varsity Athlete × Division 1		-0.032 (0.053) [-0.135, 0.071]				
College Varsity Athlete × FBS			-0.016 (0.057) [-0.128, 0.096]			
College BB Varsity Athlete × Division 1					0.367 (0.204) [-0.033, 0.768]	
College BB Varsity Athlete × FBS						0.221 (0.200) [-0.170, 0.612]
College Varsity Athlete Non BB × Division 1					-0.046 (0.053) [-0.151, 0.058]	
College Varsity Athlete Non BB × FBS						-0.034 (0.058) [-0.149, 0.080]
NCAA Division I		0.050* (0.021) [0.010, 0.091]			0.050* (0.021) [0.010, 0.090]	
NCAA FBS			0.054** (0.021) [0.013, 0.095]			0.054* (0.021) [0.013, 0.095]
Single-Parent Household	-0.055* (0.023) [-0.100, -0.011]	-0.056* (0.023) [-0.100, -0.012]	-0.055* (0.023) [-0.099, -0.011]	-0.055* (0.023) [-0.100, -0.011]	-0.056* (0.023) [-0.100, -0.012]	-0.055* (0.023) [-0.099, -0.011]
Family Income (\$10K)	0.006** (0.002) [0.002, 0.010]	0.005** (0.002) [0.001, 0.009]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]
Family Income Below Poverty Line	-0.001 (0.043) [-0.085, 0.082]	-0.004 (0.042) [-0.088, 0.079]	-0.004 (0.042) [-0.087, 0.079]	0.001 (0.043) [-0.083, 0.084]	-0.001 (0.043) [-0.085, 0.082]	-0.002 (0.042) [-0.085, 0.081]
Number of Siblings	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.022** (0.007) [-0.036, -0.008]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]
Father Education	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]

**TABLE RBFO\_E3.4C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.015]	0.007 (0.005) [-0.003, 0.016]	0.007 (0.005) [-0.002, 0.016]	0.007 (0.005) [-0.002, 0.016]
Urban Location	0.036 (0.020) [-0.003, 0.074]	0.031 (0.020) [-0.008, 0.069]	0.030 (0.020) [-0.009, 0.069]	0.036 (0.020) [-0.002, 0.075]	0.031 (0.020) [-0.007, 0.070]	0.031 (0.020) [-0.008, 0.069]
Cognitive Ability (Z-Score)	0.113*** (0.014) [0.085, 0.140]	0.108*** (0.014) [0.080, 0.136]	0.108*** (0.014) [0.080, 0.136]	0.113*** (0.014) [0.086, 0.141]	0.109*** (0.014) [0.081, 0.137]	0.109*** (0.014) [0.081, 0.137]
Action Control: General Effort and Persistence Scale	0.034* (0.015) [0.004, 0.064]	0.035* (0.015) [0.005, 0.065]	0.035* (0.015) [0.005, 0.065]	0.033* (0.015) [0.003, 0.063]	0.035* (0.015) [0.005, 0.065]	0.035* (0.015) [0.005, 0.065]
Control Expectation Scale	0.004 (0.016) [-0.026, 0.035]	0.003 (0.016) [-0.027, 0.034]	0.003 (0.016) [-0.028, 0.034]	0.004 (0.016) [-0.027, 0.034]	0.002 (0.016) [-0.029, 0.032]	0.002 (0.016) [-0.028, 0.033]
Instrumental Motivation - Utility Interest - Scale	0.001 (0.011) [-0.021, 0.024]	-0.000 (0.011) [-0.022, 0.022]	-0.000 (0.011) [-0.022, 0.022]	0.002 (0.011) [-0.020, 0.024]	0.000 (0.011) [-0.022, 0.023]	0.001 (0.011) [-0.022, 0.023]
Non-Cognitive Ability (EXTERNAL)	0.088* (0.044) [0.001, 0.175]	0.084 (0.044) [-0.002, 0.170]	0.086* (0.044) [0.001, 0.172]	0.087 (0.044) [-0.000, 0.174]	0.081 (0.044) [-0.004, 0.167]	0.084 (0.044) [-0.001, 0.170]
Black - not Hispanic	-0.047 (0.039) [-0.124, 0.029]	-0.054 (0.039) [-0.131, 0.023]	-0.047 (0.039) [-0.124, 0.030]	-0.052 (0.039) [-0.128, 0.025]	-0.059 (0.039) [-0.136, 0.018]	-0.051 (0.039) [-0.127, 0.026]
American Indian or Alaska Native	-0.050 (0.130) [-0.306, 0.205]	-0.045 (0.129) [-0.299, 0.208]	-0.044 (0.128) [-0.296, 0.208]	-0.050 (0.130) [-0.305, 0.205]	-0.047 (0.130) [-0.301, 0.207]	-0.045 (0.128) [-0.297, 0.206]
Asian or Pacific Islander	0.025 (0.033) [-0.039, 0.090]	0.022 (0.033) [-0.043, 0.086]	0.022 (0.033) [-0.042, 0.087]	0.026 (0.033) [-0.039, 0.090]	0.022 (0.033) [-0.043, 0.086]	0.023 (0.033) [-0.042, 0.087]
Hispanic or Latino	0.041 (0.036) [-0.030, 0.111]	0.043 (0.036) [-0.028, 0.114]	0.040 (0.036) [-0.030, 0.111]	0.041 (0.036) [-0.030, 0.112]	0.044 (0.036) [-0.027, 0.114]	0.041 (0.036) [-0.030, 0.112]
Constant	0.109 (0.187) [-0.258, 0.476]	0.109 (0.184) [-0.252, 0.470]	0.108 (0.183) [-0.252, 0.468]	0.113 (0.187) [-0.254, 0.479]	0.117 (0.184) [-0.244, 0.477]	0.112 (0.183) [-0.247, 0.472]
Observations	2,190	2,190	2,190	2,190	2,190	2,190
Adjusted R-squared	0.105	0.107	0.107	0.105	0.108	0.107

**TABLE RBFO\_E3.4C: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.006 (0.038)				
Incremental Effect of College Athletics for FBS Students			0.012 (0.049)			
Incremental Effect of College BB Athletics for Division I Students					0.400*** (0.077)	
Incremental Effect of College BB Athletics for FBS Students						0.351*** (0.085)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

**TABLE RBFO\_E3.4D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**

**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.017 (0.027) [-0.037, 0.070]	0.023 (0.027) [-0.031, 0.076]	0.015 (0.030) [-0.044, 0.073]			
College Varsity and High School BB Varsity Athlete				0.234*** (0.036) [0.163, 0.304]	0.239* (0.118) [0.007, 0.470]	0.387*** (0.073) [0.244, 0.530]
College Varsity Athlete Non BB				0.012 (0.028) [-0.042, 0.067]	0.015 (0.027) [-0.039, 0.069]	0.004 (0.030) [-0.055, 0.064]
College Varsity Athlete × Black	0.025 (0.106) [-0.184, 0.233]					
College Varsity Athlete × Income Below Poverty Line		-0.119 (0.155) [-0.423, 0.185]				
College Varsity Athlete × Single-Parent Household			0.017 (0.065) [-0.110, 0.144]			
College BB Varsity Athlete × Black				0.010 (0.266) [-0.511, 0.532]		
College BB Varsity Athlete × Single-Parent Household						-0.439 (0.259) [-0.948, 0.070]
College Varsity Athlete Non BB × Black				-0.006 (0.111) [-0.224, 0.212]		
College Varsity Athlete Non BB × Income Below Poverty Line					-0.112 (0.156) [-0.417, 0.193]	
College Varsity Athlete Non BB × Single-Parent Household						0.032 (0.066) [-0.098, 0.162]
Single-Parent Household	-0.055* (0.023) [-0.100, -0.011]	-0.056* (0.023) [-0.100, -0.012]	-0.057* (0.024) [-0.104, -0.010]	-0.055* (0.023) [-0.100, -0.011]	-0.056* (0.023) [-0.100, -0.012]	-0.056* (0.024) [-0.103, -0.009]
Family Income (\$10K)	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]	0.006** (0.002) [0.002, 0.010]
Family Income Below Poverty Line	-0.001 (0.043) [-0.084, 0.083]	0.005 (0.044) [-0.080, 0.091]	-0.001 (0.043) [-0.084, 0.083]	0.001 (0.043) [-0.083, 0.084]	0.007 (0.044) [-0.079, 0.092]	0.002 (0.043) [-0.081, 0.086]
Number of Siblings	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]	-0.021** (0.007) [-0.035, -0.007]
Father Education	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.006 (0.004) [-0.002, 0.014]	0.005 (0.004) [-0.002, 0.013]

**TABLE RBFO\_E3.4D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	0.006 (0.005) [-0.003, 0.015]	0.006 (0.005) [-0.003, 0.016]	0.006 (0.005) [-0.003, 0.015]	0.007 (0.005) [-0.003, 0.016]	0.007 (0.005) [-0.002, 0.016]	0.007 (0.005) [-0.002, 0.016]
Urban Location	0.036 (0.020) [-0.003, 0.074]	0.036 (0.020) [-0.002, 0.075]	0.036 (0.020) [-0.003, 0.074]	0.036 (0.020) [-0.002, 0.075]	0.036 (0.020) [-0.002, 0.075]	0.036 (0.020) [-0.003, 0.074]
Cognitive Ability (Z-Score)	0.113*** (0.014) [0.085, 0.140]	0.113*** (0.014) [0.085, 0.141]	0.113*** (0.014) [0.085, 0.140]	0.113*** (0.014) [0.085, 0.141]	0.113*** (0.014) [0.086, 0.141]	0.114*** (0.014) [0.086, 0.142]
Action Control: General Effort and Persistence Scale	0.034* (0.015) [0.004, 0.064]	0.034* (0.015) [0.004, 0.064]	0.034* (0.015) [0.004, 0.064]	0.033* (0.015) [0.003, 0.063]	0.033* (0.015) [0.003, 0.063]	0.033* (0.015) [0.003, 0.063]
Control Expectation Scale	0.004 (0.016) [-0.026, 0.035]	0.004 (0.016) [-0.027, 0.035]	0.004 (0.016) [-0.026, 0.035]	0.004 (0.016) [-0.027, 0.034]	0.004 (0.016) [-0.027, 0.034]	0.003 (0.016) [-0.027, 0.034]
Instrumental Motivation - Utility Interest - Scale	0.001 (0.011) [-0.021, 0.024]	0.002 (0.011) [-0.021, 0.024]	0.001 (0.011) [-0.021, 0.024]	0.002 (0.011) [-0.020, 0.024]	0.002 (0.011) [-0.020, 0.025]	0.003 (0.011) [-0.019, 0.026]
Non-Cognitive Ability (EXTERNAL)	0.088* (0.044) [0.001, 0.175]	0.088* (0.044) [0.001, 0.176]	0.088* (0.044) [0.001, 0.176]	0.087 (0.044) [-0.000, 0.174]	0.087* (0.044) [0.000, 0.174]	0.088* (0.045) [0.001, 0.176]
Black - not Hispanic	-0.051 (0.042) [-0.133, 0.031]	-0.047 (0.039) [-0.124, 0.030]	-0.047 (0.039) [-0.124, 0.029]	-0.051 (0.042) [-0.133, 0.031]	-0.051 (0.039) [-0.128, 0.026]	-0.052 (0.039) [-0.129, 0.024]
American Indian or Alaska Native	-0.050 (0.130) [-0.305, 0.205]	-0.052 (0.130) [-0.308, 0.203]	-0.051 (0.131) [-0.308, 0.205]	-0.050 (0.130) [-0.306, 0.205]	-0.052 (0.130) [-0.307, 0.203]	-0.053 (0.131) [-0.310, 0.204]
Asian or Pacific Islander	0.025 (0.033) [-0.039, 0.090]	0.025 (0.033) [-0.039, 0.089]	0.025 (0.033) [-0.039, 0.090]	0.026 (0.033) [-0.039, 0.090]	0.025 (0.033) [-0.039, 0.089]	0.025 (0.033) [-0.039, 0.090]
Hispanic or Latino	0.040 (0.036) [-0.030, 0.111]	0.040 (0.036) [-0.031, 0.111]	0.041 (0.036) [-0.030, 0.111]	0.041 (0.036) [-0.030, 0.112]	0.040 (0.036) [-0.031, 0.111]	0.041 (0.036) [-0.029, 0.112]
Constant	0.110 (0.187) [-0.257, 0.477]	0.107 (0.187) [-0.260, 0.474]	0.108 (0.187) [-0.259, 0.476]	0.113 (0.187) [-0.254, 0.480]	0.111 (0.187) [-0.256, 0.478]	0.110 (0.187) [-0.258, 0.477]
Observations	2,190	2,190	2,190	2,190	2,190	2,190
Adjusted R-squared	0.105	0.105	0.105	0.105	0.105	0.106



**TABLE RBFO\_E3.4D: College Graduation**

**Dependent Variable: Post-Secondary Education Attained - Bachelor Degree or Higher - by 2012; Linear Probability Model**  
**Sex: Female (Alternative BB Definition); Conditional on Attending A Non-Profit 4-year PSE Institution by 2006**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.041 (0.103)					
Incremental Effect of College Athletics for Income Below Poverty Line		-0.097 (0.153)				
Incremental Effect of College Athletics for Single-Parent Household			0.032 (0.058)			
Incremental Effect of College BB Athletics for Blacks				0.244 (0.264)		
Incremental Effect of College BB Athletics for Income Below Poverty Line					0.239* (0.118)	
Incremental Effect of College BB Athletics for Single-Parent Household						-0.052 (0.249)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Source: ELS.

## TABLE RBFO\_E4.1A: Log Annual Wage

Dependent Variable: Log Annual Income in 2011

Sex: Male (Alternative BB/FB Definition)

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.113** (0.036) [0.042 , 0.184]	
High School Sophomore BB/FB Varsity Athlete			0.108* (0.053) [0.004 , 0.213]
High School Sophomore Non BB/FB Varsity Athlete			0.114** (0.038) [0.039 , 0.190]
Single-Parent Household	-0.009 (0.043) [-0.095 , 0.076]	-0.008 (0.043) [-0.093 , 0.077]	-0.007 (0.043) [-0.092 , 0.077]
Family Income (\$10K)	0.006 (0.004) [-0.002 , 0.014]	0.005 (0.004) [-0.003 , 0.013]	0.005 (0.004) [-0.003 , 0.013]
Family Income Below Poverty Line	-0.101 (0.091) [-0.278 , 0.077]	-0.103 (0.091) [-0.281 , 0.074]	-0.103 (0.090) [-0.281 , 0.074]
Number of Siblings	0.006 (0.014) [-0.022 , 0.034]	0.006 (0.014) [-0.023 , 0.034]	0.006 (0.014) [-0.023 , 0.034]
Father Education	0.011 (0.009) [-0.006 , 0.029]	0.010 (0.009) [-0.008 , 0.028]	0.010 (0.009) [-0.008 , 0.028]
Mother Education	-0.003 (0.013) [-0.029 , 0.022]	-0.004 (0.013) [-0.029 , 0.021]	-0.004 (0.013) [-0.029 , 0.021]
Urban Location	-0.013 (0.038) [-0.087 , 0.062]	-0.013 (0.038) [-0.088 , 0.061]	-0.013 (0.038) [-0.088 , 0.061]
Cognitive Ability (Z-Score)	0.073** (0.024) [0.026 , 0.119]	0.073** (0.024) [0.026 , 0.119]	0.073** (0.024) [0.026 , 0.119]
Action Control: General Effort and Persistence Scale	0.020 (0.032) [-0.042 , 0.081]	0.022 (0.031) [-0.040 , 0.084]	0.022 (0.031) [-0.040 , 0.084]

## TABLE RBFO\_E4.1A: Log Annual Wage

Dependent Variable: Log Annual Income in 2011

Sex: Male (Alternative BB/FB Definition)

VARIABLES	(1)	(2)	(3)
Control Expectation Scale	0.001 (0.025) [-0.048 , 0.050]	-0.000 (0.025) [-0.050 , 0.049]	-0.000 (0.025) [-0.050 , 0.049]
Instrumental Motivation - Utility Interest - Scale	0.047 (0.026) [-0.003 , 0.097]	0.039 (0.026) [-0.011 , 0.089]	0.039 (0.026) [-0.011 , 0.089]
Non-Cognitive Ability (EXTERNAL)	0.111* (0.050) [0.013 , 0.208]	0.108* (0.049) [0.011 , 0.205]	0.108* (0.050) [0.010 , 0.206]
Black - not Hispanic	-0.155 (0.088) [-0.327 , 0.017]	-0.153 (0.088) [-0.326 , 0.019]	-0.153 (0.089) [-0.328 , 0.023]
American Indian or Alaska Native	0.029 (0.251) [-0.462 , 0.521]	0.014 (0.252) [-0.479 , 0.508]	0.016 (0.251) [-0.477 , 0.509]
Asian or Pacific Islander	0.101 (0.062) [-0.020 , 0.222]	0.113 (0.062) [-0.009 , 0.235]	0.113 (0.062) [-0.009 , 0.235]
Hispanic or Latino	-0.041 (0.060) [-0.159 , 0.077]	-0.034 (0.060) [-0.153 , 0.084]	-0.034 (0.060) [-0.152 , 0.084]
Full Time Worker	0.744*** (0.048) [0.650 , 0.838]	0.739*** (0.048) [0.645 , 0.833]	0.739*** (0.048) [0.645 , 0.833]
Student in 2011	-0.284*** (0.037) [-0.357 , -0.211]	-0.282*** (0.037) [-0.355 , -0.210]	-0.282*** (0.037) [-0.355 , -0.209]
Constant	9.098*** (0.221) [8.665 , 9.531]	9.075*** (0.218) [8.647 , 9.502]	9.076*** (0.220) [8.645 , 9.507]
Observations	2,560	2,560	2,560
Adjusted R-squared	0.178	0.181	0.181

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RBFO\_E4.1B: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.124*** (0.036) [0.053, 0.195]	0.116** (0.036) [0.046, 0.187]	0.098* (0.043) [0.014, 0.182]			
HS Sophomore Athlete × Black	-0.129 (0.172) [-0.465, 0.207]					
HS Sophomore Athlete × Income Below Poverty Line		-0.038 (0.177) [-0.384, 0.308]				
HS Sophomore Athlete × Single-Parent Household			0.046 (0.076) [-0.103, 0.195]			
High School Sophomore BB/FB Varsity Athlete				0.077 (0.056) [-0.033, 0.188]	0.081 (0.054) [-0.025, 0.187]	0.056 (0.064) [-0.069, 0.182]
High School Sophomore Non BB/FB Varsity Athlete				0.133*** (0.038) [0.059, 0.207]	0.124** (0.038) [0.050, 0.198]	0.106* (0.045) [0.017, 0.195]
HS Sophomore BB/FB Athlete × Black				0.161 (0.169) [-0.171, 0.492]		
HS Non BB/FB Varsity Athlete × Black				-0.281 (0.217) [-0.707, 0.145]		
HS Sophomore BB/FB Athlete × Income Below Poverty Line					0.271 (0.213) [-0.146, 0.689]	
HS Non BB/FB Varsity Athlete × Income Below Poverty Line					-0.141 (0.203) [-0.540, 0.258]	
HS Sophomore BB/FB Athlete × Single-Parent Household						0.139 (0.113) [-0.082, 0.360]
HS Non BB/FB Varsity Athlete × Single-Parent Household						0.023 (0.080) [-0.135, 0.180]
Single-Parent Household	-0.008 (0.043) [-0.093, 0.077]	-0.008 (0.043) [-0.093, 0.077]	-0.035 (0.062) [-0.157, 0.088]	-0.009 (0.043) [-0.093, 0.075]	-0.007 (0.043) [-0.091, 0.078]	-0.035 (0.063) [-0.158, 0.088]
Family Income (\$10K)	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]
Family Income Below Poverty Line	-0.106 (0.091) [-0.285, 0.073]	-0.084 (0.115) [-0.309, 0.142]	-0.102 (0.091) [-0.279, 0.076]	-0.102 (0.091) [-0.279, 0.076]	-0.085 (0.115) [-0.311, 0.141]	-0.102 (0.090) [-0.279, 0.075]
Number of Siblings	0.006 (0.014) [-0.023, 0.034]	0.006 (0.014) [-0.023, 0.034]	0.005 (0.014) [-0.023, 0.034]	0.006 (0.014) [-0.022, 0.034]	0.005 (0.014) [-0.023, 0.034]	0.005 (0.014) [-0.023, 0.034]

**TABLE RBFO\_E4.1B: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.010 (0.009) [-0.008, 0.028]	0.010 (0.009) [-0.008, 0.028]	0.010 (0.009) [-0.008, 0.028]	0.010 (0.009) [-0.008, 0.028]	0.010 (0.009) [-0.008, 0.028]	0.010 (0.009) [-0.008, 0.028]
Mother Education	-0.004 (0.013) [-0.029, 0.021]	-0.004 (0.013) [-0.030, 0.022]	-0.004 (0.013) [-0.029, 0.021]	-0.004 (0.013) [-0.029, 0.021]	-0.004 (0.013) [-0.029, 0.022]	-0.004 (0.013) [-0.029, 0.021]
Urban Location	-0.015 (0.038) [-0.089, 0.059]	-0.014 (0.038) [-0.088, 0.060]	-0.013 (0.038) [-0.088, 0.061]	-0.020 (0.038) [-0.094, 0.053]	-0.015 (0.038) [-0.089, 0.060]	-0.012 (0.038) [-0.087, 0.063]
Cognitive Ability (Z-Score)	0.072** (0.024) [0.026, 0.118]	0.073** (0.024) [0.026, 0.119]	0.073** (0.024) [0.026, 0.119]	0.074** (0.024) [0.027, 0.120]	0.074** (0.024) [0.028, 0.120]	0.073** (0.024) [0.027, 0.119]
Action Control: General Effort and Persistence Scale	0.023 (0.032) [-0.039, 0.084]	0.022 (0.032) [-0.040, 0.084]	0.022 (0.031) [-0.039, 0.084]	0.023 (0.031) [-0.039, 0.084]	0.022 (0.032) [-0.040, 0.084]	0.022 (0.032) [-0.040, 0.084]
Control Expectation Scale	-0.000 (0.025) [-0.050, 0.049]	-0.000 (0.025) [-0.050, 0.049]	-0.001 (0.025) [-0.050, 0.048]	-0.002 (0.025) [-0.051, 0.048]	-0.000 (0.025) [-0.050, 0.049]	-0.002 (0.025) [-0.051, 0.048]
Instrumental Motivation - Utility Interest - Scale	0.038 (0.026) [-0.012, 0.089]	0.039 (0.026) [-0.011, 0.090]	0.039 (0.026) [-0.011, 0.090]	0.039 (0.026) [-0.011, 0.089]	0.040 (0.026) [-0.011, 0.090]	0.040 (0.026) [-0.011, 0.090]
Non-Cognitive Ability (EXTERNAL)	0.108* (0.049) [0.011, 0.205]	0.108* (0.049) [0.012, 0.203]	0.107* (0.050) [0.010, 0.204]	0.106* (0.049) [0.009, 0.203]	0.105* (0.049) [0.010, 0.201]	0.105* (0.050) [0.007, 0.204]
Black - not Hispanic	-0.076 (0.118) [-0.307, 0.155]	-0.153 (0.088) [-0.325, 0.019]	-0.154 (0.088) [-0.327, 0.018]	-0.074 (0.118) [-0.305, 0.157]	-0.151 (0.089) [-0.325, 0.023]	-0.157 (0.090) [-0.333, 0.019]
American Indian or Alaska Native	0.012 (0.252) [-0.482, 0.506]	0.014 (0.252) [-0.480, 0.508]	0.010 (0.252) [-0.484, 0.503]	0.030 (0.248) [-0.456, 0.516]	0.029 (0.248) [-0.459, 0.516]	0.006 (0.253) [-0.489, 0.501]
Asian or Pacific Islander	0.114 (0.062) [-0.007, 0.236]	0.112 (0.062) [-0.010, 0.234]	0.113 (0.062) [-0.009, 0.235]	0.113 (0.062) [-0.008, 0.235]	0.115 (0.062) [-0.007, 0.237]	0.112 (0.062) [-0.009, 0.234]
Hispanic or Latino	-0.033 (0.060) [-0.152, 0.085]	-0.034 (0.060) [-0.152, 0.085]	-0.036 (0.060) [-0.154, 0.082]	-0.031 (0.060) [-0.150, 0.087]	-0.029 (0.060) [-0.147, 0.090]	-0.034 (0.060) [-0.152, 0.084]
Full Time Worker	0.738*** (0.048) [0.644, 0.832]	0.739*** (0.048) [0.644, 0.833]	0.739*** (0.048) [0.645, 0.833]	0.737*** (0.048) [0.642, 0.831]	0.741*** (0.048) [0.647, 0.835]	0.739*** (0.048) [0.645, 0.833]
Student in 2011	-0.282*** (0.037) [-0.355, -0.209]	-0.282*** (0.037) [-0.355, -0.209]	-0.282*** (0.037) [-0.355, -0.209]	-0.282*** (0.037) [-0.355, -0.210]	-0.282*** (0.037) [-0.355, -0.209]	-0.281*** (0.037) [-0.354, -0.208]
Constant	9.070*** (0.219) [8.641, 9.499]	9.076*** (0.218) [8.649, 9.503]	9.085*** (0.219) [8.655, 9.515]	9.086*** (0.221) [8.654, 9.519]	9.086*** (0.219) [8.656, 9.515]	9.090*** (0.221) [8.656, 9.524]
Observations	2,560	2,560	2,560	2,560	2,560	2,560
Adjusted R-squared	0.181	0.181	0.181	0.183	0.182	0.181

**TABLE RBFO\_E4.1B: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	-0.005 (0.168)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.078 (0.172)				
Incremental Effect of HS Athletics for Single-Parent Household			0.144* (0.064)			
Incremental Effect of HS BB/FB Athletics for Blacks				0.238 (0.159)		
Incremental Effect of HS BB/FB Athletics for Income Below Poverty Line					0.353 (0.206)	
Incremental Effect of HS BB/FB Athletics for Single-Parent Household						0.195* (0.093)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RBFO\_E4.1C: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.113* (0.051) [0.013, 0.213]	0.107 (0.072) [-0.034, 0.249]	0.128* (0.058) [0.013, 0.242]			
College Varsity and High School BB/FB Varsity Athlete				0.128 (0.165) [-0.195, 0.451]	0.190 (0.218) [-0.239, 0.618]	0.205 (0.180) [-0.149, 0.559]
College Varsity Athlete Non BB/FB				0.112* (0.053) [0.008, 0.215]	0.101 (0.075) [-0.046, 0.248]	0.121* (0.061) [0.003, 0.240]
College Varsity Athlete × Division 1		0.018 (0.097) [-0.172, 0.207]				
College Varsity Athlete × FBS			-0.052 (0.114) [-0.275, 0.171]			
College BB/FB Varsity Athlete × Division 1					-0.153 (0.332) [-0.803, 0.498]	
College BB/FB Varsity Athlete × FBS						-0.565 (0.336) [-1.224, 0.095]
College Varsity Athlete Non BB/FB × Division 1					0.031 (0.099) [-0.164, 0.226]	
College Varsity Athlete Non BB/FB × FBS						-0.023 (0.117) [-0.251, 0.206]
NCAA Division 1		0.064 (0.041) [-0.017, 0.145]			0.064 (0.042) [-0.017, 0.146]	
NCAA FBS			0.066 (0.047) [-0.027, 0.158]			0.066 (0.047) [-0.027, 0.158]
Single-Parent Household	-0.008 (0.043) [-0.093, 0.078]	-0.006 (0.043) [-0.091, 0.079]	-0.007 (0.043) [-0.092, 0.078]	-0.008 (0.043) [-0.093, 0.077]	-0.007 (0.043) [-0.092, 0.078]	-0.008 (0.043) [-0.093, 0.077]
Family Income (\$10K)	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]
Family Income Below Poverty Line	-0.100 (0.091) [-0.278, 0.078]	-0.100 (0.091) [-0.278, 0.077]	-0.101 (0.091) [-0.278, 0.077]	-0.100 (0.091) [-0.278, 0.078]	-0.101 (0.091) [-0.278, 0.077]	-0.102 (0.091) [-0.280, 0.076]
Number of Siblings	0.007 (0.014) [-0.022, 0.035]	0.007 (0.014) [-0.022, 0.035]	0.007 (0.014) [-0.021, 0.035]	0.006 (0.014) [-0.022, 0.035]	0.007 (0.014) [-0.022, 0.035]	0.007 (0.014) [-0.021, 0.035]
Father Education	0.010 (0.009) [-0.007, 0.028]	0.009 (0.009) [-0.009, 0.027]	0.010 (0.009) [-0.008, 0.028]	0.010 (0.009) [-0.007, 0.028]	0.009 (0.009) [-0.009, 0.027]	0.010 (0.009) [-0.008, 0.028]

**TABLE RBFO\_E4.1C: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	-0.004 (0.013) [-0.029, 0.022]	-0.004 (0.013) [-0.030, 0.021]	-0.004 (0.013) [-0.030, 0.021]	-0.004 (0.013) [-0.029, 0.022]	-0.005 (0.013) [-0.030, 0.021]	-0.005 (0.013) [-0.030, 0.021]
Urban Location	-0.013 (0.038) [-0.088, 0.061]	-0.015 (0.038) [-0.090, 0.059]	-0.016 (0.038) [-0.091, 0.059]	-0.013 (0.038) [-0.088, 0.061]	-0.015 (0.038) [-0.090, 0.059]	-0.015 (0.038) [-0.089, 0.060]
Cognitive Ability (Z-Score)	0.071** (0.024) [0.025, 0.117]	0.063** (0.024) [0.016, 0.110]	0.065** (0.024) [0.018, 0.112]	0.071** (0.024) [0.024, 0.117]	0.063** (0.024) [0.016, 0.110]	0.066** (0.024) [0.019, 0.113]
Action Control: General Effort and Persistence Scale	0.017 (0.032) [-0.044, 0.079]	0.017 (0.032) [-0.045, 0.079]	0.018 (0.032) [-0.044, 0.080]	0.017 (0.032) [-0.044, 0.079]	0.017 (0.032) [-0.045, 0.079]	0.018 (0.032) [-0.044, 0.080]
Control Expectation Scale	0.001 (0.025) [-0.048, 0.050]	-0.002 (0.025) [-0.051, 0.048]	-0.001 (0.025) [-0.050, 0.048]	0.001 (0.025) [-0.048, 0.050]	-0.002 (0.025) [-0.051, 0.048]	-0.001 (0.025) [-0.050, 0.048]
Instrumental Motivation - Utility Interest - Scale	0.046 (0.026) [-0.004, 0.096]	0.045 (0.026) [-0.005, 0.096]	0.045 (0.026) [-0.005, 0.095]	0.046 (0.026) [-0.004, 0.096]	0.045 (0.026) [-0.005, 0.095]	0.045 (0.026) [-0.006, 0.095]
Non-Cognitive Ability (EXTERNAL)	0.106* (0.050) [0.008, 0.204]	0.101* (0.050) [0.003, 0.198]	0.103* (0.050) [0.006, 0.201]	0.106* (0.050) [0.008, 0.204]	0.101* (0.050) [0.003, 0.198]	0.103* (0.050) [0.005, 0.201]
Black - not Hispanic	-0.164 (0.088) [-0.337, 0.008]	-0.174 (0.089) [-0.347, 0.000]	-0.166 (0.088) [-0.338, 0.006]	-0.165 (0.088) [-0.337, 0.008]	-0.175* (0.089) [-0.349, -0.000]	-0.167 (0.088) [-0.340, 0.006]
American Indian or Alaska Native	0.025 (0.247) [-0.459, 0.510]	0.034 (0.247) [-0.451, 0.520]	0.029 (0.247) [-0.455, 0.513]	0.025 (0.247) [-0.459, 0.510]	0.035 (0.248) [-0.451, 0.521]	0.030 (0.247) [-0.455, 0.514]
Asian or Pacific Islander	0.102 (0.062) [-0.020, 0.223]	0.097 (0.062) [-0.024, 0.218]	0.100 (0.062) [-0.021, 0.222]	0.102 (0.062) [-0.020, 0.223]	0.097 (0.062) [-0.024, 0.218]	0.100 (0.062) [-0.021, 0.222]
Hispanic or Latino	-0.041 (0.060) [-0.160, 0.077]	-0.040 (0.061) [-0.158, 0.079]	-0.040 (0.060) [-0.159, 0.079]	-0.041 (0.060) [-0.160, 0.077]	-0.039 (0.061) [-0.158, 0.080]	-0.037 (0.061) [-0.155, 0.082]
Full Time Worker	0.740*** (0.048) [0.645, 0.834]	0.740*** (0.048) [0.645, 0.834]	0.740*** (0.048) [0.645, 0.834]	0.740*** (0.048) [0.645, 0.834]	0.739*** (0.048) [0.645, 0.834]	0.740*** (0.048) [0.645, 0.835]
Student in 2011	-0.283*** (0.037) [-0.356, -0.210]	-0.283*** (0.037) [-0.356, -0.210]	-0.283*** (0.037) [-0.356, -0.210]	-0.283*** (0.037) [-0.356, -0.210]	-0.283*** (0.037) [-0.356, -0.209]	-0.283*** (0.037) [-0.357, -0.210]
Constant	9.132*** (0.224) [8.694, 9.570]	9.161*** (0.224) [8.721, 9.600]	9.148*** (0.224) [8.708, 9.587]	9.132*** (0.224) [8.693, 9.570]	9.165*** (0.224) [8.726, 9.605]	9.151*** (0.224) [8.711, 9.591]
Observations	2,560	2,560	2,560	2,560	2,560	2,560
Adjusted R-squared	0.179	0.180	0.179	0.179	0.179	0.179



**TABLE RBFO\_E4.1C: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.125 (0.066)				
Incremental Effect of College Athletics for FBS Students			0.076 (0.099)			
Incremental Effect of College BB/FB Athletics for Division I Students					0.037 (0.249)	
Incremental Effect of College BB/FB Athletics for FBS Students						-0.360 (0.283)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RBFO\_E4.1D: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.098 (0.053) [-0.006, 0.202]	0.111* (0.052) [0.009, 0.212]	0.116* (0.055) [0.008, 0.225]			
College Varsity and High School BB/FB Varsity Athlete				0.010 (0.181) [-0.344, 0.365]	0.127 (0.171) [-0.208, 0.461]	0.046 (0.183) [-0.313, 0.404]
College Varsity Athlete Non BB/FB				0.104 (0.055) [-0.003, 0.212]	0.109* (0.054) [0.005, 0.214]	0.121* (0.057) [0.009, 0.233]
College Varsity Athlete × Black	0.148 (0.185) [-0.215, 0.512]					
College Varsity Athlete × Income Below Poverty Line		0.064 (0.274) [-0.474, 0.601]				
College Varsity Athlete × Single-Parent Household			-0.013 (0.126) [-0.259, 0.233]			
College BB/FB Varsity Athlete × Black				0.488 (0.383) [-0.263, 1.239]		
College BB/FB Varsity Athlete × Income Below Poverty Line					0.014 (0.622) [-1.205, 1.233]	
College BB/FB Varsity Athlete × Single-Parent Household						0.221 (0.358) [-0.480, 0.922]
College Varsity Athlete Non BB/FB × Black				0.086 (0.200) [-0.307, 0.479]		
College Varsity Athlete Non BB/FB × Income Below Poverty Line					0.073 (0.300) [-0.515, 0.660]	
College Varsity Athlete Non BB/FB × Single-Parent Household						-0.040 (0.132) [-0.300, 0.219]
Single-Parent Household	-0.007 (0.043) [-0.092, 0.078]	-0.008 (0.043) [-0.093, 0.077]	-0.006 (0.045) [-0.095, 0.082]	-0.009 (0.043) [-0.094, 0.077]	-0.008 (0.043) [-0.093, 0.077]	-0.006 (0.045) [-0.095, 0.082]
Family Income (\$10K)	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]	0.005 (0.004) [-0.003, 0.013]
Family Income Below Poverty Line	-0.096 (0.090) [-0.272, 0.080]	-0.103 (0.094) [-0.288, 0.081]	-0.100 (0.091) [-0.278, 0.078]	-0.097 (0.090) [-0.273, 0.080]	-0.103 (0.094) [-0.288, 0.081]	-0.100 (0.091) [-0.278, 0.078]
Number of Siblings	0.007 (0.014) [-0.021, 0.035]	0.007 (0.014) [-0.022, 0.035]	0.006 (0.014) [-0.022, 0.035]	0.007 (0.014) [-0.021, 0.035]	0.007 (0.014) [-0.022, 0.035]	0.007 (0.014) [-0.022, 0.035]

**TABLE RBFO\_E4.1D: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	0.010 (0.009) [-0.007, 0.028]	0.010 (0.009) [-0.007, 0.028]	0.010 (0.009) [-0.007, 0.028]	0.010 (0.009) [-0.007, 0.028]	0.010 (0.009) [-0.008, 0.028]	0.010 (0.009) [-0.007, 0.028]
Mother Education	-0.004 (0.013) [-0.029, 0.022]	-0.004 (0.013) [-0.029, 0.022]	-0.004 (0.013) [-0.029, 0.022]	-0.004 (0.013) [-0.030, 0.022]	-0.004 (0.013) [-0.029, 0.022]	-0.004 (0.013) [-0.029, 0.022]
Urban Location	-0.013 (0.038) [-0.088, 0.061]	-0.013 (0.038) [-0.088, 0.061]	-0.013 (0.038) [-0.088, 0.061]	-0.015 (0.038) [-0.090, 0.060]	-0.013 (0.038) [-0.088, 0.061]	-0.013 (0.038) [-0.088, 0.062]
Cognitive Ability (Z-Score)	0.070** (0.024) [0.024, 0.117]	0.071** (0.024) [0.024, 0.117]	0.071** (0.024) [0.025, 0.117]	0.070** (0.024) [0.024, 0.117]	0.071** (0.024) [0.024, 0.117]	0.070** (0.024) [0.024, 0.117]
Action Control: General Effort and Persistence Scale	0.018 (0.032) [-0.044, 0.080]	0.017 (0.032) [-0.044, 0.079]	0.017 (0.031) [-0.044, 0.079]	0.018 (0.032) [-0.044, 0.080]	0.018 (0.032) [-0.044, 0.079]	0.018 (0.031) [-0.044, 0.079]
Control Expectation Scale	0.000 (0.025) [-0.049, 0.049]	0.001 (0.025) [-0.048, 0.050]	0.001 (0.025) [-0.048, 0.050]	0.001 (0.025) [-0.049, 0.050]	0.001 (0.025) [-0.048, 0.050]	0.001 (0.025) [-0.048, 0.050]
Instrumental Motivation - Utility Interest - Scale	0.047 (0.026) [-0.003, 0.097]	0.046 (0.026) [-0.004, 0.096]	0.046 (0.026) [-0.004, 0.096]	0.047 (0.026) [-0.004, 0.097]	0.046 (0.026) [-0.004, 0.096]	0.046 (0.026) [-0.004, 0.096]
Non-Cognitive Ability (EXTERNAL)	0.106* (0.050) [0.008, 0.204]	0.105* (0.050) [0.008, 0.203]	0.106* (0.050) [0.008, 0.204]	0.105* (0.050) [0.007, 0.203]	0.105* (0.050) [0.007, 0.203]	0.106* (0.050) [0.008, 0.204]
Black - not Hispanic	-0.189 (0.100) [-0.385, 0.007]	-0.164 (0.088) [-0.337, 0.008]	-0.164 (0.088) [-0.337, 0.008]	-0.189 (0.100) [-0.385, 0.007]	-0.164 (0.088) [-0.337, 0.008]	-0.168 (0.088) [-0.341, 0.005]
American Indian or Alaska Native	0.025 (0.248) [-0.460, 0.511]	0.025 (0.247) [-0.460, 0.510]	0.025 (0.247) [-0.460, 0.509]	0.025 (0.247) [-0.460, 0.510]	0.025 (0.247) [-0.460, 0.510]	0.024 (0.247) [-0.460, 0.509]
Asian or Pacific Islander	0.101 (0.062) [-0.020, 0.223]	0.101 (0.062) [-0.020, 0.222]	0.102 (0.062) [-0.019, 0.223]	0.101 (0.062) [-0.020, 0.223]	0.101 (0.062) [-0.020, 0.222]	0.102 (0.062) [-0.019, 0.224]
Hispanic or Latino	-0.043 (0.060) [-0.161, 0.076]	-0.041 (0.060) [-0.159, 0.078]	-0.041 (0.060) [-0.160, 0.077]	-0.042 (0.060) [-0.161, 0.076]	-0.041 (0.060) [-0.159, 0.078]	-0.041 (0.060) [-0.159, 0.078]
Full Time Worker	0.741*** (0.048) [0.646, 0.835]	0.740*** (0.048) [0.645, 0.834]	0.740*** (0.048) [0.645, 0.834]	0.742*** (0.048) [0.648, 0.837]	0.740*** (0.048) [0.645, 0.834]	0.740*** (0.048) [0.645, 0.834]
Student in 2011	-0.282*** (0.037) [-0.356, -0.209]	-0.283*** (0.037) [-0.356, -0.210]	-0.283*** (0.037) [-0.356, -0.210]	-0.282*** (0.037) [-0.356, -0.209]	-0.283*** (0.037) [-0.356, -0.210]	-0.283*** (0.037) [-0.356, -0.210]
Constant	9.131*** (0.224) [8.693, 9.569]	9.133*** (0.223) [8.696, 9.571]	9.131*** (0.224) [8.692, 9.569]	9.132*** (0.224) [8.693, 9.570]	9.133*** (0.223) [8.695, 9.572]	9.130*** (0.224) [8.691, 9.569]
Observations	2,560	2,560	2,560	2,560	2,560	2,560
Adjusted R-squared	0.179	0.179	0.179	0.179	0.179	0.179

**TABLE RBFO\_E4.1D: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Male (Alternative BB/FB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.246 (0.178)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.174 (0.270)				
Incremental Effect of College Athletics for Single-Parent Household			0.103 (0.115)			
Incremental Effect of College BB/FB Athletics for Blacks				0.498 (0.339)		
Incremental Effect of College BB/FB Athletics for Income Below Poverty Line					0.141 (0.600)	
Incremental Effect of College BB/FB Athletics for Single-Parent Household						0.267 (0.310)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

## TABLE RBFO\_E4.2A: Log Annual Wage

Dependent Variable: Log Annual Income in 2011

Sex: Female (Alternative BB Definition)

VARIABLES	(1)	(2)	(3)
High School Sophomore Varsity Athlete		0.141*** (0.035) [0.071, 0.210]	
High School Sophomore BB Varsity Athlete			-0.025 (0.157) [-0.332, 0.283]
High School Sophomore Non BB Varsity Athlete			0.150*** (0.035) [0.081, 0.218]
Single-Parent Household	-0.056 (0.040) [-0.134, 0.023]	-0.048 (0.040) [-0.126, 0.030]	-0.048 (0.040) [-0.126, 0.030]
Family Income (\$10K)	0.009* (0.004) [0.000, 0.017]	0.008 (0.004) [-0.000, 0.017]	0.008 (0.004) [-0.001, 0.017]
Family Income Below Poverty Line	-0.062 (0.071) [-0.202, 0.078]	-0.056 (0.072) [-0.197, 0.084]	-0.057 (0.071) [-0.197, 0.083]
Number of Siblings	-0.031* (0.013) [-0.057, -0.005]	-0.031* (0.013) [-0.057, -0.005]	-0.031* (0.013) [-0.056, -0.005]
Father Education	-0.007 (0.009) [-0.024, 0.009]	-0.008 (0.009) [-0.025, 0.009]	-0.008 (0.009) [-0.025, 0.009]
Mother Education	-0.011 (0.010) [-0.030, 0.008]	-0.013 (0.010) [-0.032, 0.006]	-0.013 (0.010) [-0.032, 0.006]
Urban Location	0.035 (0.040) [-0.043, 0.112]	0.038 (0.039) [-0.040, 0.115]	0.037 (0.040) [-0.041, 0.114]
Cognitive Ability (Z-Score)	0.188*** (0.024) [0.141, 0.234]	0.185*** (0.024) [0.139, 0.232]	0.184*** (0.024) [0.137, 0.231]
Action Control: General Effort and Persistence Scale	-0.020 (0.027) [-0.074, 0.033]	-0.018 (0.027) [-0.071, 0.036]	-0.017 (0.027) [-0.071, 0.037]

## TABLE RBFO\_E4.2A: Log Annual Wage

Dependent Variable: Log Annual Income in 2011

Sex: Female (Alternative BB Definition)

VARIABLES	(1)	(2)	(3)
Control Expectation Scale	0.064* (0.027) [0.010, 0.118]	0.056* (0.027) [0.003, 0.110]	0.057* (0.027) [0.003, 0.111]
Instrumental Motivation - Utility Interest - Scale	0.024 (0.023) [-0.020, 0.069]	0.023 (0.023) [-0.021, 0.067]	0.021 (0.023) [-0.023, 0.066]
Non-Cognitive Ability (EXTERNAL)	0.108 (0.070) [-0.030, 0.245]	0.103 (0.070) [-0.035, 0.240]	0.104 (0.070) [-0.034, 0.241]
Black - not Hispanic	-0.105 (0.075) [-0.253, 0.042]	-0.098 (0.075) [-0.244, 0.049]	-0.092 (0.075) [-0.239, 0.054]
American Indian or Alaska Native	-0.340 (0.201) [-0.735, 0.055]	-0.348 (0.203) [-0.747, 0.051]	-0.344 (0.201) [-0.738, 0.049]
Asian or Pacific Islander	0.174* (0.074) [0.028, 0.319]	0.199** (0.075) [0.052, 0.345]	0.199** (0.074) [0.053, 0.345]
Hispanic or Latino	-0.023 (0.062) [-0.145, 0.099]	-0.008 (0.063) [-0.131, 0.115]	-0.006 (0.062) [-0.128, 0.116]
Full Time Worker	0.844*** (0.047) [0.752, 0.936]	0.838*** (0.047) [0.746, 0.930]	0.837*** (0.047) [0.745, 0.929]
Student in 2011	-0.221*** (0.036) [-0.292, -0.150]	-0.226*** (0.036) [-0.297, -0.155]	-0.226*** (0.036) [-0.297, -0.155]
Constant	9.211*** (0.302) [8.619, 9.803]	9.192*** (0.302) [8.599, 9.785]	9.188*** (0.303) [8.595, 9.782]
Observations	3,140	3,140	3,140
Adjusted R-squared	0.212	0.215	0.216

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RBFO\_E4.2B: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
High School Sophomore Varsity Athlete	0.112** (0.036) [0.041, 0.183]	0.150*** (0.037) [0.078, 0.222]	0.083* (0.042) [0.001, 0.164]			
HS Sophomore Athlete × Black	0.284 (0.145) [-0.001, 0.569]					
HS Sophomore Athlete × Income Below Poverty Line		-0.092 (0.126) [-0.340, 0.156]				
HS Sophomore Athlete × Single-Parent Household			0.160* (0.075) [0.013, 0.307]			
High School Sophomore BB Varsity Athlete				-0.129 (0.174) [-0.469, 0.212]	-0.032 (0.175) [-0.375, 0.312]	-0.181 (0.210) [-0.592, 0.231]
High School Sophomore Non BB Varsity Athlete				0.123*** (0.036) [0.052, 0.193]	0.159*** (0.036) [0.088, 0.230]	0.095* (0.041) [0.015, 0.176]
HS Sophomore BB Athlete × Black				0.598 (0.392) [-0.170, 1.366]		
HS Non BB Varsity Athlete × Black				0.264 (0.146) [-0.022, 0.549]		
HS Sophomore BB Athlete × Income Below Poverty Line					0.074 (0.231) [-0.380, 0.528]	
HS Non BB Varsity Athlete × Income Below Poverty Line					-0.099 (0.131) [-0.357, 0.158]	
HS Sophomore BB Athlete × Single-Parent Household						0.431 (0.296) [-0.149, 1.011]
HS Non BB Varsity Athlete × Single-Parent Household						0.148* (0.075) [0.000, 0.295]
Single-Parent Household	-0.048 (0.040) [-0.126, 0.030]	-0.047 (0.040) [-0.125, 0.031]	-0.132* (0.062) [-0.254, -0.011]	-0.049 (0.040) [-0.127, 0.029]	-0.048 (0.040) [-0.126, 0.030]	-0.134* (0.062) [-0.255, -0.012]
Family Income (\$10K)	0.008 (0.004) [-0.000, 0.017]	0.008 (0.004) [-0.001, 0.017]	0.008 (0.004) [-0.000, 0.017]	0.008 (0.004) [-0.000, 0.017]	0.008 (0.004) [-0.001, 0.016]	0.008 (0.004) [-0.000, 0.017]
Family Income Below Poverty Line	-0.053 (0.071) [-0.193, 0.087]	-0.020 (0.094) [-0.203, 0.164]	-0.053 (0.072) [-0.194, 0.088]	-0.050 (0.072) [-0.190, 0.091]	-0.023 (0.094) [-0.206, 0.161]	-0.054 (0.072) [-0.195, 0.086]
Number of Siblings	-0.031* (0.013) [-0.057, -0.005]	-0.031* (0.013) [-0.056, -0.005]	-0.031* (0.013) [-0.057, -0.006]	-0.031* (0.013) [-0.057, -0.005]	-0.031* (0.013) [-0.057, -0.005]	-0.031* (0.013) [-0.057, -0.006]

**TABLE RBFO\_E4.2B: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Father Education	-0.008 (0.009) [-0.025, 0.009]	-0.008 (0.009) [-0.025, 0.009]	-0.008 (0.009) [-0.025, 0.009]	-0.008 (0.009) [-0.025, 0.009]	-0.008 (0.009) [-0.025, 0.009]	-0.008 (0.009) [-0.025, 0.009]
Mother Education	-0.013 (0.010) [-0.032, 0.006]	-0.013 (0.010) [-0.032, 0.006]	-0.013 (0.010) [-0.032, 0.006]	-0.013 (0.010) [-0.032, 0.006]	-0.013 (0.010) [-0.032, 0.006]	-0.013 (0.010) [-0.032, 0.006]
Urban Location	0.037 (0.039) [-0.040, 0.114]	0.038 (0.040) [-0.040, 0.115]	0.037 (0.040) [-0.040, 0.115]	0.036 (0.040) [-0.041, 0.114]	0.037 (0.040) [-0.041, 0.114]	0.036 (0.040) [-0.041, 0.114]
Cognitive Ability (Z-Score)	0.184*** (0.024) [0.137, 0.231]	0.185*** (0.024) [0.138, 0.232]	0.185*** (0.024) [0.138, 0.232]	0.183*** (0.024) [0.137, 0.230]	0.184*** (0.024) [0.137, 0.231]	0.183*** (0.024) [0.137, 0.230]
Action Control: General Effort and Persistence Scale	-0.018 (0.027) [-0.071, 0.036]	-0.018 (0.027) [-0.072, 0.035]	-0.016 (0.027) [-0.070, 0.037]	-0.017 (0.027) [-0.071, 0.036]	-0.018 (0.027) [-0.072, 0.036]	-0.015 (0.027) [-0.069, 0.038]
Control Expectation Scale	0.057* (0.027) [0.003, 0.111]	0.057* (0.027) [0.003, 0.110]	0.056* (0.027) [0.002, 0.110]	0.057* (0.027) [0.004, 0.111]	0.057* (0.027) [0.004, 0.111]	0.057* (0.027) [0.003, 0.110]
Instrumental Motivation - Utility Interest - Scale	0.024 (0.023) [-0.020, 0.069]	0.023 (0.023) [-0.021, 0.067]	0.022 (0.023) [-0.022, 0.066]	0.023 (0.023) [-0.021, 0.067]	0.022 (0.023) [-0.023, 0.066]	0.020 (0.023) [-0.024, 0.064]
Non-Cognitive Ability (EXTERNAL)	0.107 (0.070) [-0.031, 0.245]	0.102 (0.070) [-0.035, 0.240]	0.102 (0.070) [-0.035, 0.239]	0.108 (0.070) [-0.029, 0.246]	0.104 (0.070) [-0.034, 0.242]	0.103 (0.070) [-0.034, 0.240]
Black - not Hispanic	-0.239* (0.117) [-0.468, -0.009]	-0.097 (0.075) [-0.243, 0.050]	-0.097 (0.075) [-0.243, 0.050]	-0.239* (0.117) [-0.469, -0.009]	-0.090 (0.075) [-0.237, 0.057]	-0.094 (0.075) [-0.241, 0.052]
American Indian or Alaska Native	-0.349 (0.203) [-0.748, 0.049]	-0.346 (0.203) [-0.744, 0.052]	-0.350 (0.207) [-0.756, 0.056]	-0.343 (0.199) [-0.734, 0.048]	-0.340 (0.200) [-0.732, 0.053]	-0.353 (0.206) [-0.757, 0.051]
Asian or Pacific Islander	0.193** (0.075) [0.046, 0.339]	0.198** (0.075) [0.052, 0.344]	0.194** (0.075) [0.048, 0.341]	0.193** (0.074) [0.047, 0.339]	0.199** (0.074) [0.053, 0.345]	0.193** (0.075) [0.047, 0.339]
Hispanic or Latino	-0.013 (0.063) [-0.136, 0.110]	-0.009 (0.063) [-0.132, 0.114]	-0.005 (0.063) [-0.128, 0.118]	-0.010 (0.062) [-0.132, 0.112]	-0.007 (0.062) [-0.129, 0.115]	-0.005 (0.063) [-0.127, 0.118]
Full Time Worker	0.839*** (0.047) [0.747, 0.931]	0.838*** (0.047) [0.746, 0.930]	0.840*** (0.047) [0.749, 0.932]	0.839*** (0.047) [0.748, 0.931]	0.838*** (0.047) [0.746, 0.930]	0.841*** (0.047) [0.749, 0.932]
Student in 2011	-0.226*** (0.036) [-0.297, -0.155]	-0.226*** (0.036) [-0.297, -0.155]	-0.227*** (0.036) [-0.298, -0.156]	-0.227*** (0.036) [-0.298, -0.156]	-0.226*** (0.036) [-0.297, -0.155]	-0.227*** (0.036) [-0.298, -0.156]
Constant	9.187*** (0.302) [8.594, 9.780]	9.188*** (0.303) [8.595, 9.781]	9.223*** (0.300) [8.634, 9.812]	9.184*** (0.303) [8.590, 9.777]	9.183*** (0.303) [8.589, 9.777]	9.222*** (0.301) [8.632, 9.812]
Observations	3,140	3,140	3,140	3,140	3,140	3,140
Adjusted R-squared	0.216	0.215	0.216	0.217	0.215	0.217



**TABLE RBFO\_E4.2B: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of HS Athletics for Blacks	0.395** (0.141)					
Incremental Effect of HS Athletics for Income Below Poverty Line		0.058 (0.121)				
Incremental Effect of HS Athletics for Single-Parent Household			0.242*** (0.063)			
Incremental Effect of HS BB Athletics for Blacks				0.469 (0.352)		
Incremental Effect of HS BB Athletics for Income Below Poverty Line					0.042 (0.152)	
Incremental Effect of HS BB Athletics for Single-Parent Household						0.250 (0.210)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RBFO\_E4.2C: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.170** (0.056) [0.059, 0.280]	0.225*** (0.065) [0.098, 0.352]	0.212*** (0.059) [0.098, 0.327]			
College Varsity and High School BB Varsity Athlete				-0.061 (0.446) [-0.935, 0.812]	0.022 (0.217) [-0.403, 0.447]	0.298 (0.307) [-0.304, 0.899]
College Varsity Athlete Non BB				0.177** (0.056) [0.067, 0.287]	0.231*** (0.066) [0.102, 0.361]	0.211*** (0.059) [0.095, 0.327]
College Varsity Athlete × Division 1		-0.117 (0.113) [-0.338, 0.105]				
College Varsity Athlete × FBS			-0.169 (0.155) [-0.472, 0.134]			
College BB Varsity Athlete × Division 1					-0.180 (0.890) [-1.925, 1.565]	
College BB Varsity Athlete × FBS						-0.982 (1.034) [-3.010, 1.045]
College Varsity Athlete Non BB × Division 1					-0.115 (0.113) [-0.336, 0.106]	
College Varsity Athlete Non BB × FBS						-0.132 (0.152) [-0.431, 0.167]
NCAA Division 1		0.046 (0.039) [-0.030, 0.122]			0.046 (0.039) [-0.030, 0.122]	
NCAA FBS			0.052 (0.040) [-0.025, 0.130]			0.053 (0.040) [-0.024, 0.131]
Single-Parent Household	-0.053 (0.040) [-0.132, 0.026]	-0.052 (0.040) [-0.131, 0.027]	-0.051 (0.040) [-0.130, 0.028]	-0.053 (0.040) [-0.132, 0.026]	-0.052 (0.040) [-0.131, 0.026]	-0.052 (0.040) [-0.130, 0.027]
Family Income (\$10K)	0.008 (0.004) [-0.001, 0.016]	0.007 (0.004) [-0.001, 0.016]	0.008 (0.004) [-0.001, 0.016]	0.008 (0.004) [-0.001, 0.016]	0.007 (0.004) [-0.001, 0.016]	0.007 (0.004) [-0.001, 0.016]
Family Income Below Poverty Line	-0.062 (0.071) [-0.201, 0.078]	-0.065 (0.071) [-0.205, 0.075]	-0.065 (0.071) [-0.204, 0.075]	-0.063 (0.071) [-0.203, 0.077]	-0.066 (0.071) [-0.206, 0.074]	-0.066 (0.071) [-0.206, 0.073]
Number of Siblings	-0.032* (0.013) [-0.057, -0.006]	-0.031* (0.013) [-0.057, -0.005]	-0.031* (0.013) [-0.057, -0.005]	-0.032* (0.013) [-0.058, -0.006]	-0.031* (0.013) [-0.057, -0.005]	-0.031* (0.013) [-0.057, -0.006]
Father Education	-0.009 (0.009) [-0.026, 0.008]	-0.009 (0.009) [-0.026, 0.008]	-0.009 (0.009) [-0.026, 0.008]	-0.008 (0.009) [-0.025, 0.009]	-0.009 (0.009) [-0.026, 0.008]	-0.009 (0.009) [-0.026, 0.008]

**TABLE RBFO\_E4.2C: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	-0.011 (0.010) [-0.030, 0.007]	-0.012 (0.010) [-0.030, 0.007]	-0.012 (0.010) [-0.031, 0.007]	-0.012 (0.010) [-0.030, 0.007]	-0.012 (0.010) [-0.031, 0.007]	-0.012 (0.010) [-0.031, 0.006]
Urban Location	0.034 (0.039) [-0.044, 0.111]	0.029 (0.040) [-0.049, 0.107]	0.029 (0.040) [-0.048, 0.107]	0.033 (0.039) [-0.044, 0.111]	0.028 (0.040) [-0.050, 0.106]	0.029 (0.040) [-0.048, 0.107]
Cognitive Ability (Z-Score)	0.187*** (0.024) [0.140, 0.233]	0.180*** (0.024) [0.133, 0.228]	0.182*** (0.024) [0.135, 0.230]	0.186*** (0.024) [0.140, 0.233]	0.180*** (0.024) [0.133, 0.227]	0.181*** (0.024) [0.134, 0.229]
Action Control: General Effort and Persistence Scale	-0.023 (0.027) [-0.076, 0.031]	-0.022 (0.027) [-0.076, 0.031]	-0.023 (0.027) [-0.076, 0.031]	-0.022 (0.027) [-0.076, 0.031]	-0.022 (0.027) [-0.076, 0.031]	-0.023 (0.027) [-0.076, 0.031]
Control Expectation Scale	0.063* (0.027) [0.010, 0.117]	0.062* (0.027) [0.009, 0.115]	0.062* (0.027) [0.009, 0.116]	0.063* (0.027) [0.010, 0.117]	0.062* (0.027) [0.009, 0.115]	0.063* (0.027) [0.010, 0.116]
Instrumental Motivation - Utility Interest - Scale	0.026 (0.023) [-0.019, 0.070]	0.025 (0.023) [-0.020, 0.069]	0.026 (0.023) [-0.019, 0.070]	0.025 (0.023) [-0.019, 0.069]	0.024 (0.023) [-0.020, 0.068]	0.025 (0.023) [-0.019, 0.069]
Non-Cognitive Ability (EXTERNAL)	0.102 (0.070) [-0.035, 0.240]	0.099 (0.070) [-0.039, 0.237]	0.100 (0.070) [-0.038, 0.238]	0.103 (0.070) [-0.034, 0.240]	0.099 (0.070) [-0.039, 0.237]	0.102 (0.070) [-0.036, 0.240]
Black - not Hispanic	-0.109 (0.075) [-0.256, 0.038]	-0.112 (0.076) [-0.261, 0.036]	-0.109 (0.075) [-0.257, 0.038]	-0.106 (0.075) [-0.253, 0.041]	-0.109 (0.076) [-0.258, 0.039]	-0.106 (0.075) [-0.253, 0.042]
American Indian or Alaska Native	-0.355 (0.203) [-0.752, 0.043]	-0.361 (0.203) [-0.760, 0.038]	-0.359 (0.202) [-0.756, 0.038]	-0.355 (0.203) [-0.752, 0.042]	-0.361 (0.203) [-0.760, 0.038]	-0.358 (0.202) [-0.755, 0.039]
Asian or Pacific Islander	0.183* (0.074) [0.037, 0.329]	0.180* (0.075) [0.034, 0.327]	0.181* (0.075) [0.035, 0.327]	0.183* (0.074) [0.037, 0.329]	0.180* (0.075) [0.034, 0.327]	0.181* (0.075) [0.034, 0.327]
Hispanic or Latino	-0.020 (0.062) [-0.142, 0.103]	-0.018 (0.062) [-0.140, 0.104]	-0.020 (0.062) [-0.142, 0.102]	-0.020 (0.062) [-0.142, 0.103]	-0.018 (0.062) [-0.140, 0.104]	-0.021 (0.062) [-0.143, 0.101]
Full Time Worker	0.843*** (0.047) [0.751, 0.935]	0.841*** (0.047) [0.749, 0.933]	0.842*** (0.047) [0.750, 0.934]	0.842*** (0.047) [0.750, 0.935]	0.840*** (0.047) [0.748, 0.932]	0.842*** (0.047) [0.750, 0.934]
Student in 2011	-0.222*** (0.036) [-0.293, -0.151]	-0.223*** (0.036) [-0.294, -0.152]	-0.222*** (0.036) [-0.293, -0.151]	-0.222*** (0.036) [-0.293, -0.151]	-0.223*** (0.036) [-0.295, -0.152]	-0.222*** (0.036) [-0.294, -0.151]
Constant	9.249*** (0.302) [8.658, 9.841]	9.265*** (0.304) [8.670, 9.861]	9.262*** (0.303) [8.668, 9.856]	9.248*** (0.302) [8.656, 9.840]	9.264*** (0.304) [8.668, 9.859]	9.261*** (0.303) [8.667, 9.856]
Observations	3,140	3,140	3,140	3,140	3,140	3,140
Adjusted R-squared	0.213	0.213	0.213	0.213	0.213	0.213

**TABLE RBFO\_E4.2C: Log Annual Wage**  
**Dependent Variable: Log Annual Income in 2011**  
**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Division I Students		0.108 (0.093)				
Incremental Effect of College Athletics for FBS Students			0.044 (0.143)			
Incremental Effect of College BB Athletics for Division I Students					-0.158 (0.864)	
Incremental Effect of College BB Athletics for FBS Students						-0.685 (0.987)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.

**TABLE RBFO\_E4.2D: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
College Varsity Athlete	0.173** (0.056) [0.063, 0.283]	0.160** (0.057) [0.048, 0.272]	0.170** (0.060) [0.053, 0.287]			
College Varsity and High School BB Varsity Athlete				-0.086 (0.181) [-0.442, 0.269]	-0.063 (0.446) [-0.937, 0.811]	-0.166 (0.589) [-1.322, 0.990]
College Varsity Athlete Non BB				0.177** (0.057) [0.066, 0.288]	0.167** (0.057) [0.055, 0.278]	0.180** (0.058) [0.066, 0.295]
College Varsity Athlete × Black	-0.035 (0.267) [-0.558, 0.487]					
College Varsity Athlete × Income Below Poverty Line		0.478 (0.266) [-0.044, 1.001]				
College Varsity Athlete × Single-Parent Household			-0.002 (0.155) [-0.306, 0.301]			
College BB Varsity Athlete × Black				0.050 (0.894) [-1.703, 1.802]		
College BB Varsity Athlete × Single-Parent Household						0.413 (0.606) [-0.774, 1.600]
College Varsity Athlete Non BB × Black				-0.007 (0.262) [-0.521, 0.507]		
College Varsity Athlete Non BB × Income Below Poverty Line					0.472 (0.266) [-0.050, 0.994]	
College Varsity Athlete Non BB × Single-Parent Household						-0.015 (0.159) [-0.326, 0.296]
Single-Parent Household	-0.053 (0.040) [-0.132, 0.026]	-0.052 (0.040) [-0.131, 0.027]	-0.053 (0.041) [-0.133, 0.028]	-0.053 (0.040) [-0.132, 0.026]	-0.053 (0.040) [-0.131, 0.026]	-0.053 (0.041) [-0.134, 0.028]
Family Income (\$10K)	0.008 (0.004) [-0.001, 0.017]	0.008 (0.004) [-0.001, 0.017]	0.008 (0.004) [-0.001, 0.016]	0.008 (0.004) [-0.001, 0.016]	0.008 (0.004) [-0.001, 0.017]	0.008 (0.004) [-0.001, 0.016]
Family Income Below Poverty Line	-0.062 (0.071) [-0.202, 0.078]	-0.070 (0.072) [-0.211, 0.071]	-0.062 (0.072) [-0.202, 0.079]	-0.063 (0.071) [-0.203, 0.077]	-0.071 (0.072) [-0.212, 0.070]	-0.063 (0.072) [-0.204, 0.077]
Number of Siblings	-0.032* (0.013) [-0.057, -0.006]	-0.032* (0.013) [-0.058, -0.006]	-0.032* (0.013) [-0.057, -0.006]	-0.032* (0.013) [-0.058, -0.006]	-0.032* (0.013) [-0.058, -0.006]	-0.032* (0.013) [-0.058, -0.006]
Father Education	-0.009 (0.009) [-0.026, 0.008]	-0.008 (0.009) [-0.026, 0.009]	-0.009 (0.009) [-0.026, 0.008]	-0.008 (0.009) [-0.025, 0.009]	-0.008 (0.009) [-0.025, 0.009]	-0.008 (0.009) [-0.025, 0.009]

**TABLE RBFO\_E4.2D: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Mother Education	-0.011 (0.010) [-0.030, 0.007]	-0.012 (0.010) [-0.030, 0.007]	-0.011 (0.010) [-0.030, 0.007]	-0.012 (0.010) [-0.030, 0.007]	-0.012 (0.010) [-0.031, 0.007]	-0.012 (0.010) [-0.031, 0.007]
Urban Location	0.034 (0.039) [-0.044, 0.111]	0.034 (0.039) [-0.044, 0.111]	0.034 (0.039) [-0.044, 0.111]	0.033 (0.040) [-0.044, 0.111]	0.033 (0.039) [-0.044, 0.111]	0.034 (0.039) [-0.044, 0.111]
Cognitive Ability (Z-Score)	0.187*** (0.024) [0.140, 0.233]	0.186*** (0.024) [0.139, 0.233]	0.187*** (0.024) [0.140, 0.233]	0.186*** (0.024) [0.140, 0.233]	0.186*** (0.024) [0.139, 0.233]	0.186*** (0.024) [0.139, 0.233]
Action Control: General Effort and Persistence Scale	-0.023 (0.027) [-0.076, 0.031]	-0.023 (0.027) [-0.076, 0.031]	-0.023 (0.027) [-0.076, 0.031]	-0.022 (0.027) [-0.076, 0.031]	-0.023 (0.027) [-0.076, 0.031]	-0.022 (0.027) [-0.076, 0.031]
Control Expectation Scale	0.063* (0.027) [0.010, 0.117]	0.064* (0.027) [0.010, 0.117]	0.063* (0.027) [0.010, 0.117]	0.063* (0.027) [0.010, 0.117]	0.064* (0.027) [0.011, 0.117]	0.064* (0.027) [0.010, 0.117]
Instrumental Motivation - Utility Interest - Scale	0.026 (0.023) [-0.019, 0.070]	0.025 (0.023) [-0.019, 0.069]	0.026 (0.023) [-0.019, 0.070]	0.025 (0.023) [-0.020, 0.069]	0.024 (0.023) [-0.020, 0.069]	0.024 (0.023) [-0.020, 0.069]
Non-Cognitive Ability (EXTERNAL)	0.102 (0.070) [-0.035, 0.240]	0.102 (0.070) [-0.035, 0.240]	0.102 (0.070) [-0.035, 0.240]	0.103 (0.070) [-0.035, 0.240]	0.103 (0.070) [-0.035, 0.240]	0.103 (0.070) [-0.035, 0.240]
Black - not Hispanic	-0.106 (0.078) [-0.260, 0.048]	-0.109 (0.075) [-0.256, 0.039]	-0.109 (0.075) [-0.256, 0.038]	-0.106 (0.079) [-0.260, 0.048]	-0.106 (0.075) [-0.253, 0.041]	-0.107 (0.075) [-0.254, 0.041]
American Indian or Alaska Native	-0.355 (0.203) [-0.752, 0.043]	-0.351 (0.202) [-0.748, 0.045]	-0.354 (0.202) [-0.751, 0.042]	-0.355 (0.203) [-0.752, 0.042]	-0.352 (0.202) [-0.749, 0.045]	-0.354 (0.202) [-0.751, 0.043]
Asian or Pacific Islander	0.183* (0.074) [0.037, 0.329]	0.183* (0.075) [0.036, 0.329]	0.183* (0.075) [0.037, 0.329]	0.183* (0.074) [0.037, 0.329]	0.182* (0.075) [0.036, 0.329]	0.183* (0.075) [0.037, 0.329]
Hispanic or Latino	-0.019 (0.062) [-0.142, 0.103]	-0.018 (0.062) [-0.140, 0.104]	-0.020 (0.062) [-0.142, 0.103]	-0.020 (0.062) [-0.142, 0.103]	-0.018 (0.062) [-0.140, 0.104]	-0.020 (0.062) [-0.142, 0.102]
Full Time Worker	0.843*** (0.047) [0.751, 0.935]	0.842*** (0.047) [0.750, 0.935]	0.843*** (0.047) [0.751, 0.935]	0.842*** (0.047) [0.750, 0.935]	0.842*** (0.047) [0.749, 0.934]	0.842*** (0.047) [0.749, 0.934]
Student in 2011	-0.222*** (0.036) [-0.293, -0.150]	-0.222*** (0.036) [-0.293, -0.151]	-0.222*** (0.036) [-0.293, -0.150]	-0.222*** (0.036) [-0.293, -0.150]	-0.222*** (0.036) [-0.293, -0.151]	-0.222*** (0.036) [-0.293, -0.150]
Constant	9.249*** (0.302) [8.657, 9.841]	9.251*** (0.302) [8.659, 9.843]	9.249*** (0.302) [8.658, 9.841]	9.248*** (0.302) [8.656, 9.841]	9.250*** (0.302) [8.658, 9.842]	9.248*** (0.302) [8.656, 9.840]
Observations	3,140	3,140	3,140	3,140	3,140	3,140
Adjusted R-squared	0.213	0.213	0.213	0.212	0.213	0.213

**TABLE RBFO\_E4.2D: Log Annual Wage**

**Dependent Variable: Log Annual Income in 2011**

**Sex: Female (Alternative BB Definition)**

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Incremental Effect of College Athletics for Blacks	0.137 (0.261)					
Incremental Effect of College Athletics for Income Below Poverty Line		0.638* (0.260)				
Incremental Effect of College Athletics for Single-Parent Household			0.168 (0.142)			
Incremental Effect of College BB Athletics for Blacks				-0.037 (0.877)		
Incremental Effect of College BB Athletics for Income Below Poverty Line					-0.063 (0.446)	
Incremental Effect of College BB Athletics for Single-Parent Household						0.247 (0.136)

Robust standard errors in parentheses. 95-percent confidence intervals in square brackets.

Number of observations is rounded to the nearest 10.

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05

Respondents not identifying themselves as Asian or American Indian or Black or Hispanic are the excluded category.

Respondents without a wage are excluded.

Source: ELS.