

**PLAYING LIKE A BOY:
GENDER, HIGH SCHOOL SPORT PARTICIPATION, AND EARLY CAREER SUCCESS**

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DEDICATION

This dissertation is dedicated to grandfather, Fred ‘Buster’ McLaughlin, whose love and support helped this little chickadee find her wings.

Then piped a tiny voice hard by,
Gay and polite, a cheeful cry,
“Chick-a-dee-dee!” saucy note
Out of a sound heart and merry throat
As if it said, “Good day, good sir!
Fine afternoon, old passenger!
Happy to meet you in these places
Where January brings few faces.”

~Ralph Waldo Emerson~

ABSTRACT

Sport has been hailed as a symbol of masculinity in American society. Through participation in sport, girls and boys are socialized to a masculine, competitive culture that may have long-term consequences for participants in other gendered institutions throughout the life course. Like sport, work has been identified as a gendered institution where women are often relegated to lower-paying positions and more feminized occupations.

In this mixed-methods study, I examine whether participation in high school sports helps adolescents to successfully navigate young adult work. Specifically, I use longitudinal survey data from the Youth Development Study to test whether high school sport participation is associated with labor force participation, job categories and characteristics, pay, and workplace authority. Multi-level mixed effects models show that sport participation, among both males and females, is associated with labor force participation and earnings. Moreover, sex- and sport-specific effects also emerge. For example, I find that females who participate in contact sports, on average, work in industries characterized by a higher proportion of male workers. Sport participation was also associated with females' annual household income and supervisory authority. In-depth interviews with nine women who participated in high school sports reveal a number of mechanisms through which sport is linked to young adult work outcomes.

TABLE OF CONTENTS

List of Tables.....	viii
List of Figures.....	x
Chapter 1: Gender, Work, and Sport Culture.....	1
Chapter 2: Data, Measurement, and Analytic Strategy.....	29
Chapter 3: Selection into Sport.....	62
Chapter 4: Linking Participation in Gendered Institutions.....	73
Chapter 5: Does it Pay to Play?	102
Chapter 6: The Lessons of Sport: How Sport Affects Young Adult Work.....	138
Chapter 7: Conclusion and Future Research Plans.....	174
References.....	188
Methodological Appendix.....	204

LIST OF TABLES

Table 2.1 Survey Retention Chart.....	32
Table 2.2 Sampling of YDS Respondents' Parent(s).....	33
Table 2.3 List of Contact and Non-Contact Sports Reported by Participants.....	36
Table 2.4 Descriptive Statistics of YDS Sample.....	37
Table 2.5 Items from the Control Orientation Index.....	50
Table 3.1 Demographic and High School Characteristics.....	64
Table 3.2 Logistic Regression Predicting High School Sport Participation.....	66
Table 3.3 Young Adult Characteristics (2007) by Sex and Sport Participation.....	69
Table 4.1 Multilevel Mixed-Effects Regression Predicting Labor Force Participation...	79
Table 4.2 Multilevel Mixed-Effects Logit Predicting Work Status (separately by sex)..	85
Table 4.3 Multilevel Mixed-Effects Logit of Work Status by Sport Context.....	87
Table 4.4 Multinomial Logit Predicting 2004 Job Category (manager/professional as reference category).....	92
Table 4.5 Multilevel Mixed-Effects Regression Predicting Young Adult Industry Sex Ratio (1995-2007).....	98
Table 5.1 Logged Biweekly Earnings by Sex and Sport Participation.....	106
Table 5.2 OLS Regression Predicting Young Adults' Educational Attainment.....	108
Table 5.3 OLS Regression Predicting 2007 Logged Biweekly Earnings.....	110
Table 5.4 Multilevel Mixed-Effects Regression Predicting Young Adults' Logged Biweekly Earnings (1995-2007).....	112
Table 5.5 Multilevel Mixed-Effects Regression Predicting Logged Biweekly Earnings by Sport Context (1995-2007).....	115
Table 5.6 Multilevel Mixed-Effects Regression Predicting Young Adults' Logged Annual Household Income (2001-2008).....	120

Table 5.7 Multilevel Mixed-Effects Regression Predicting Logged Annual Household Income by Sport Context (2001-2008).....	122
Table 5.8 Multilevel Mixed-Effects Logit of Supervisory Authority (1995-2007).....	126
Table 5.9 Multilevel Mixed-Effects Logit Estimating Young Adults' Supervisory Authority by Sport Context (1995-2007).....	128
Table 5.10 Multinomial Logit Predicting Social Class Category (2005) (managers as reference category).....	131
Table 5.11 Comparison of Items from the Bem Sex Role Inventory (1995)	136

LIST OF FIGURES

Figure 2.1 De-Identified Example of YDS Work History.....	42
Figure 4.1 Proportion Employed during Young Adulthood (1995-2007).....	74
Figure 4.2 Labor Force Participation Rates across YDS and CPS Samples.....	76
Figure 4.3 Proportion Employed by Sport Participation and Sex (1995-2007).....	77
Figure 4.4 Males' Primary Occupations (2004) by Sport Participation.....	90
Figure 4.5 Females' Primary Occupations (2004) by Sport Participation.....	90
Figure 4.6 Industry Sex Ratio by Sex and Sport Participation (1995-2007).....	97
Figure 4.7 Industry Sex Ratio by Sex and Contact Sport Participation (1995-2007).....	97
Figure 5.1 Young Adults' Logged Biweekly Earnings (1995-2007).....	105
Figure 5.2 Educational Attainment of Sport Participants and Non-Participants.....	107
Figure 5.3 Young Adults' Logged Annual Household Income (2001-2008).....	118
Figure 5.4 Proportion of (Full-Time) Dual-Earner Couples.....	119
Figure 5.5 Supervisory Authority by Sport Participation and Sex (1995-2007).....	125
Figure 5.6 Males' Social Class Category (2005) by Sport Participation.....	130
Figure 5.7 Females' Social Class Category (2005) by Sport Participation.....	130

CHAPTER 1: SPORT CULTURE, GENDER, AND WORK

The study of gender and work is a prominent subfield within the discipline of sociology. Scholars have documented a persistent gender gap in earnings (Bernhardt, Morris, and Handcock 1995), inequality in obtaining workplace power and authority (Elliott and Smith 2004; Kalev 2009), the concentration of men and women in different types of occupations and industries (Cohen and Huffman 2003; Gauchat, Kelly, and Wallace 2012; Tomaskovic-Devey 1993), and the prevalence of gender discrimination and sexual harassment (Stainback, Ratliff, and Roscigno 2011; Welsh 1999). Joan Acker (1990; 1992) argues that gender is ubiquitous in many organizational processes, including formal policies and informal procedures, the construction of symbols and images, and employee interactions. The “ideal worker” is viewed as free from childrearing, housework, and other family responsibilities. Those perceived as solely committed to paid employment (historically men) are viewed as more worthy of employment and workplace authority (Acker 1990).

In addition to work, many other institutions are gendered as well. From an early age, gender socialization occurs in families, schools, churches and other religious institutions, and many other settings. The institution of sport, in many ways, parallels the workplace. As with work, the role and meaning of women and girls within this masculine institution is rather precarious. Though females are not overtly excluded from most sports, their participation is often viewed as inferior to males'. Both sport and work have been marked by increasing participation and acceptance of women and girls over time, but there remain a number of prominent domains that are largely viewed as masculine

terrain. Due to stereotypes that suggest women are not able to perform, or at least men are purportedly “naturally” more suited for such roles, women and girls are often excluded from full participation in certain sports, industries, or specific positions within each institution.

The stereotypes and assumptions that prevent women from being viewed as equal are largely rooted in differences in physical strength and supposedly innate personality differences. For example, it is assumed that women as a group are not strong enough to perform as well as men in construction or manufacturing jobs, policing and other forms of protective services, and are “naturally” better suited for less competitive fields and caregiving jobs, such as nursing or childcare. Historically, such differences gained traction in the sports world, where sports are often sex segregated and male athletes and teams are viewed as superior. Sports performed by women and girls are viewed as a less competitive or less talented alternative to those performed by their male peers.

At the same time, more critical sport scholars focus on the dynamic relationship between power and sport, analyzing how dominant ideologies are reproduced, but also contested. Using this framework, some sport scholars recognize sport as “contested terrain” (Hartmann 2000; Messner 1988) where ideological struggles often occur around gender, race, sexuality, disability, and other identities.¹ The inclusion of women and girls, then, may challenge deep-rooted stereotypes about their supposedly “natural” inferiority to men. This may be especially apparent for girls who participate in masculine sports,

¹ In contrast, some scholars view sport as a microcosm of society that reflects current social conditions (e.g., Ball 1976); however, this classic approach has been criticized for failing to account for the ways sport can contribute to social change.

more competitive teams, and advanced levels of play. Indeed, gender and sport scholars have highlighted the great lengths often taken by gatekeepers and fans alike to discredit or trivialize women athletes.

Sports advocates highlight the many advantages that sport participation can have for young girls. Through sport and physical activity, girls can, among other things, develop positive relationships with coaches and peers, gain confidence and self-esteem, and increase their self-perceptions of physical fitness and abilities (see Wiese-Bjornstal 2007 for a review of this literature). Within youth sport more generally, a common rhetoric is that the culture of sport can contribute to later workplace success. As Sabo and colleagues (1993: 44) articulate, the “popular maxim ‘Succeed in sport, succeed in life’ is at the heart of the American sports creed.” Sports advocates claim that participants learn competition, teamwork, and other skills and values that will help them communicate and get along with co-workers and superiors, and they will be better able than youth who do not participate in sports to succeed in demanding and high-paying jobs.

At the same time, there is reason to be skeptical of such wide-sweeping claims. For example, sports advocates often claim these effects for all participants in all sport contexts. This view largely ignores a burgeoning literature on the relationship between sport and a number of negative outcomes. Moreover, relatively few sport scholars have extended their analyses beyond the college years to examine whether and how sport participation affects young adults’ career trajectories and attainment. Instead, this rhetoric often relies on anecdotal evidence or empirical research that lacks strong statistical controls for social class and other background characteristics that may explain any

observed association between sport participation and work outcomes. In other words, pre-existing differences between youth who participate in sports and those who do not may lead sport participants to aspire to and succeed in young adult work. To fill this gap, I consider the role of high school sport participation on labor force participation, occupations and industries, financial resources, and workplace authority.²

Before describing my study design and logic of analyses, a review of the literature on sport culture is warranted. In the following section, I outline a number of pre-existing claims about how the culture of sport relates to work in the U.S. context. Several of these themes emerge during my qualitative interviews with women who participated in high school sports, and I will return to these ideas in Chapter 6.

The Relationship between Sport and Work

For many Americans, sport is a central part of their identities. Through sport, participants learn about the values, norms, customs, and behavior of society (Allison 1982). Some scholars have argued that sport is immensely popular as an American pastime precisely because the institution reinforces shared values that are highly regarded: competition, success, discipline and hard work, team play, and self-sacrifice (Eitzen and Sage 1982; Sage 1978).³

² Empirical findings on the relationship between sport participation and each specific work outcome will be discussed along with my quantitative analyses (Chapter 4 and Chapter 5).

³ Rigauer's *Sport und Arbeit*, translated as *Sport and Work* (1981), explicitly argues that these values are directly derived from the "techniques of productive work" that are prominent in modern industrial society.

Competition and Success

Whether it is the nation's overall place in the world economy or a community baseball game, competition is an integral part of American culture. As Kohn argues in his critique of competition, "Life for us has become an endless succession of contests. From the moment the alarm clock rings until sleep overtakes us again, from the time we are toddlers until the day we die, we are busy struggling to outdo others" (Kohn 1992: 1). In his essay on modern sport, Eric Dunning (2010) describes a long-term trend in sport towards greater competitiveness, seriousness of involvement, and achievement-orientation. Individual participants or teams strive to beat their competitors and outdo other schools, communities, or even nations.

Even at the high school level, winning "at all costs" is often emphasized. Lipsyte (1979) coined the term "varsity syndrome" to describe sports' promotion of overzealous competition, violence, specialization, professionalization, and elitism. The importance of success is reinforced when winning teams are rewarded with praise, honor, and status. It has been argued that sport participants who embrace this competitive culture may be more receptive of organizational demands to outperform their competitors in order to turn a profit. The larger social system is reinforced when individuals view each other as rivals: "Sports serve the purpose nicely, and athletes are quite deliberately led to accept the value and naturalness of an adversarial relationship" (Kohn 1992: 85). In a culture that revolves around competition, social status correlates with occupational achievement, and individuals continually strive for upward mobility. Personal effort and accomplishments define one's status and worth, and the glorified image of the "self-made man" who pulls

himself up from poverty by his own bootstraps is a symbol of the American Dream (Eitzen and Sage 1982; Rigauer 1981).

Sport's emphasis on competition may lead to a number of negative outcomes for participants. Violence, the use of steroids or other illegal performance-enhancing drugs, or other forms of rule-breaking behavior may be justified by players, coaches, and fans in the interest of winning (Silva 1983). Moreover, such behaviors are often only minimally punished by officials. In the National Hockey League, for example, "enforcers," who are expected to protect their teammates and punish opposing players, are an accepted part of the game and referees frequently allow fistfights to play out on the ice before escorting guilty parties to the penalty box.

Studies also link the highly competitive, violent nature of some sports to problem behaviors off the field, such as violence and aggression (Kreager 2007; Miller et al. 2006), crime and delinquency (Hartmann and Massoglia 2007), and alcohol and drug use (Hoffman 2006; Moore and Werch 2005; Wetherill and Fromme 2007). Crosset and colleagues (1995) describe men's sports as a "rape culture," where aggressive behavior is rewarded and commonly used to demonstrate power over others. Empirical research on the subject has produced mixed findings. Some studies suggest that student athletes are responsible for a disproportionate amount of sexual assaults committed on college campuses (e.g., Ehrhart and Sandler 1985) while others find that the propensity to commit rape is similar between collegiate athletes and other students (e.g., Caron, Haltman, and Stacy 1997). These findings are somewhat complicated by the fact that high profile collegiate and professional athletes are often subject to greater scrutiny and

media attention, though some school administrators or even police departments have conspired to cover up illegal or controversial behaviors committed by student athletes in order to avoid a public scandal.

It is important to note that the magnitude and direction of the association between sport participation and problem behaviors largely vary by sport type. Kreager (2007) for example, found that high school football players and wrestlers have greater odds of fighting than students who did not participate in sport, while participation in non-contact sports reduces the odds of fighting. Consistent with social learning theory, behavior is learned through reinforcement and modeling (Nucci and Young-Shim 2005). As such, sports may teach integrity and sportsmanship or violence and aggression, depending on the competitiveness of the game, leadership from coaches or parents, and the enforcement of rules by officials or larger governing organizations (i.e., athletic director, school principal, or athletic association).

Discipline and Hard Work

In order to achieve success, sport participants learn the importance of a strong work ethic. In the “land of opportunity,” many Americans firmly believe that success will come to those who are willing to work long and hard. Moreover, individuals should not be content with what they have but continue to strive for the American Dream, which is most often measured in material rewards (Eitzen and Sage 1982).

In his description of elite swimmers, Chambliss (2010) describes the “mundanity of excellence,” which is the result of a focus on proper technique, strict training, and

attitude (rather than “natural” talent or ability). Sport participants must learn to delay gratification in order to obtain a larger goal, such as winning a championship or individual title or record. The socialization of these shared values could explain the positive relationship between sport participation and educational attainment that has been documented by a number of sport scholars (see Hartmann 2008 for a comprehensive review of this literature). In contrast to the popular “dumb jock” stereotype, the weight of the evidence suggests that sport participants, on average, tend to perform better academically than their peers (Fejgin 1994; Hawkins and Mulkey 2005; Troutman and Dufur 2007).⁴ The higher college attendance and graduation rates among high school sport participants (e.g., Troutman and Dufur 2007) may be linked to delayed gratification, as they are more likely to forgo immediate employment in order to obtain a more desirable position in the future.

Similarly, sport has been said to reinforce discipline and respect for coaches and other adults in positions of authority. A clear hierarchy is established in sport, where players are expected to respect coaches’ authority and expertise and follow their commands. Beyond coaches, players who wish to remain active must give up some individual freedom and accept curfews, grade requirements, dress codes, and are subject to many other rules that often do not apply to the entire student body. Sage (1978: 43)

⁴ This literature has offered a number of additional hypotheses for this association, including increased interest in school, minimum grade point average requirements for athletic eligibility, increased attention from teachers and coaches, the establishment of networks and friendships with other school-oriented peers, and the desire to advance education to continue involvement in organized sports at the collegiate level (Snyder and Spreitzer 1990 in Hartmann 2008).

argues that such “hierarchical authority is an indispensable component of bureaucratic organization... The subordinate is expected to obey his superior because of the superior’s position, regardless of what personal feelings he may have about the person.” In young adult work, respecting and following supervisors’ orders may lead to greater performance evaluations, signal organizational commitment, and result in opportunities for advancement. While some could easily argue that such characteristics or values reinforce worker alienation and hierarchical organizational arrangements, such traits are likely encouraged from the employers’ perspective.

Teamwork and Self-Sacrifice

This literature also argues that sport participation teaches youth to work together as a team. This lesson is more prominent in team sports, though it should be noted that some individual sport participants also compete in team medleys (e.g., swimming or track and field) or play with a partner (e.g., tennis). The division of labor in sport requires each player to perform a specific task in a designated location in order to accomplish a larger goal (Rigauer 1981). In his essay on the socialization of bureaucracy through sport, Sage (1978: 42) explains that organizations similarly require “a sharp division of labor, and extensive specialization of employees engaged in semiautomatic, standardized production. They work under fixed rules in a highly disciplined system of control. Indeed, discipline is the watchword of bureaucracy.” This trend may be heightened by the increasing prevalence of specialization, or focusing year-round attention on a single sport (Wiersma 2002).

As Mc Laughlin (2009: 87) explains, “Clearly one of the functions that team sports—and especially basketball—play in our popular culture is to provide a visible model of teamwork...[B]asketball can and does serve the affirmative function of providing an enhanced, even a utopian, vision of what cooperative work can be.” Mc Laughlin goes on to debate whether team metaphors, increasingly commonplace in work organizations, are simply “feel-good diversions” or a central aspect of post-industrial work. Regardless, these scholars argue that the teamwork learned through sport may help prepare youth for workplace success in organizations that increasingly rely on project teams for increased institutional speed, efficiency, and expertise (Mc Laughlin 2009: 86-87).

When the primary goal in sport is to win, self-sacrifice may be required for the team to succeed. Examples of this behavior in sport are prevalent: the baseball player who sacrifices a hit in order to advance a base runner; or the basketball player who intentionally fouls out of a game in order to prevent the opposing team from scoring or to allow his team one final possession. Sage (1978: 43) argues that institutionalization and bureaucracy of modern sports leads to players being viewed as “cogs in the organization’s machinery” who “need to be conditioned to perform prescribed, fragmented tasks as instrumental to team performance.” Clearly taking a more critical view, Sage argues that “there is perhaps no social agency that is more salient and powerful for socializing youth to the bureaucratic mentality” (1978: 44).

Among other things, this literature suggests that high school sports instill in participants the values of competition, success, hard work, discipline, team work, and

self-sacrifice that are idealized by employers who must compete in a global market. If high school sport participants are more willing to “buy in” to such organizational discourse, they may earn, at least in current or potential employers’ eyes, better employment prospects and opportunities for advancement.

This review has offered one perspective as to how sport culture may influence young adult work. Regardless of whether such norms are reinforced and applied to other facets of life, there is reason to expect differences between boys and girls in their experiences in this gendered institution. Sport has long been hailed as a symbol of masculinity in American society (Messner 1988). Through sports—as both participants and fans—boys learn to socialize and connect with other boys and men and often learn masculine values and behaviors such as physicality, competitiveness, and fortitude (Hartmann 2003). This deep link between sport and masculinity has remained relatively untarnished despite growing participation by women and girls over the past half century. In the following section, I offer a general overview of gendered critiques of sport.

Gender Inequality in Sport

Feminist sport scholars point to a number of common practices or “mechanisms of containment” (Kane 1995) that help to preserve boys’ sports as superior to girls’ sports, as well as offering supposed ‘proof’ of male superiority more broadly. For example, gender stereotypes result in sport typing, where girls and boys are funneled into gender-appropriate sports and activities, such as figure skating, gymnastics, and cheerleading for girls and football, rugby, and ice hockey for boys (Kane and Snyder

1989).⁵ Even when girls and boys participate in the same sport, sports at the high school level are almost always segregated by sex⁶; therefore, team accomplishments or individual performances often cannot be compared across sex lines. Moreover, while most sports are available to both sexes, girls' sports are often altered as to be less intense or physical. The length of competition or the distance of a race are often shorter for girls (e.g., tennis, swimming), the size or weight of a ball is changed (e.g., softball versus baseball), and physicality is often more limited (e.g., the no-checking rule in girls' and women's ice hockey).

This practice creates an uneven playing field, allowing sport to be offered as 'proof' of women's inferior physical strength. Sabo (2007) identifies this sentiment—that women lack the strength and energy that is required to fully participate in sports—as the “myth of female frailty.” Such arguments have been used throughout history to limit women's participation in sport. In the late 19th and early 20th Centuries, theories of 'vital

⁵ This practice is not limited to the institution of sport, as girls and boys are socialized to conform to gender-appropriate behavior from birth. In her observation of preschools, for example, Karin Martin (1998) finds evidence of a hidden curriculum that genders everyday movement, comportment, and use of physical space. While boys were often allowed, or even encouraged, to yell or run in the classroom, girls' movement was much more restricted. Girls were also told to control their voices by being quiet(er) or 'nicer' about three times more often than boys, despite the fact that boys' play was frequently much louder. The result of this hidden curriculum is that physical differences between boys and girls are made to appear and feel natural, which is reinforced throughout the life course.

⁶ One exception to the frequent sex segregation of high school sports is competitive cheering, where boys are increasingly participating alongside girls. In their ethnographic analysis of the sport at the collegiate level, Grindstaff and West (2006) show how cheerleaders uniquely “do gender” (West and Zimmerman 2002) in ways that conform to traditional norms and expectations. For example, men cheerleaders prove their masculinity by lifting weights and avoiding feminine behaviors (such as smiling, bouncing, shaking pom-poms, or using “spirit fingers”).

energy' suggested that women should preserve their nonrenewable energy for reproduction and childbirth (Lenskyj 1986), and women were warned by the medical profession that athletic participation was harmful to their health (Cahn 1993; Griffin 1998; 2007). Even during the 1970s, women boxers were similarly warned that a blow to the breast could cause cancer (paralleling warnings from the 1920s about uterine displacement).

In more contemporary debates, sex differences in body size and strength have been used to justify sex segregation in sport. However, such aggregate differences are often misrepresented and exaggerated, as the within-sex variation in physical strength is much larger than between-sex differences. Moreover, Crittenden (2007) argues that the difference between the average male and female *athlete* is smaller than in the general public, and that any differences that do exist are largely due to conditioning. Instead of acknowledging similarities between male and female participants, attention is disproportionately given to differences (Kane 1995; Messner 2000).

When women participate in behaviors and activities that rely on the development of muscle and physical prowess, they often experience informal sanctions ranging from ridicule to severe backlash. As sport is equated with masculinity, women who invade this 'male turf' face stigmas about themselves and their bodies:

“All women in sport had to reckon with the power of the surrounding culture to stigmatize skilled female athletes. Images of mannishness, lesbianism, ugliness, and biological abnormality circulated through society, posing barriers to female athletic participation and placing an especially heavy burden on women whose very excellence evoked the nastiest kinds of accusations” (Cahn 1994: 243).

These stigmas largely stem from the assumption that only men should be good at sports. In other words, exceptional athletes are not real women. In the following section, I consider three forms of this accusation in greater detail: (1) women who excel in sports must *really* (biologically) be men; (2) women who excel in sports are not male, per se, but have masculine qualities; and (3) women who participate in sports are lesbians.

Stereotypes of the Female Sport Participant: Sex, Gender, and Sexuality

At all levels of competition, rumors have circulated about men (or boys) masquerading as women in order to obtain a competitive advantage. Even at the youngest ages, when sex differences in athletic prowess are indistinguishable, it is largely assumed that boys *should* outperform girls. For example, two fathers created a furor at a girls' soccer game in 1990 when they suspected the ten-year old goalie of the opposing team was a boy (Moewe 1990). The men were offered birth certificates for each player, but they instead demanded that the girl instead undergo a "panty check" to prove she was not a boy (their request was denied).

At the highest levels of competition, sex testing of female sport participants is much more institutionalized. At the 1966 European Track and Field Championships, women were made to undress for a "nude parade" in front of a panel of gynecologists to validate proper genitalia and the presence of breasts (Carlson 2007). Women with facial hair and more muscular build were especially scrutinized during this process (Lenskyj 1986). Shortly after, physical examinations were replaced with a buccal smear test, designed to detect chromosomal anomalies that did not necessarily offer any competitive

advantage. Furthermore, tests were notoriously inaccurate—returning false positives for the presence of a Y chromosome in an estimated 6 to 15 percent of cases (Carlson 2007). Ironically, while sport is used to reaffirm dichotomous thinking about sex and gender, sex testing sometimes (very publicly) reveals that not everyone fits easily into either category. Some intersexual women have been stripped of all previous athletic accomplishments and left standing outside the walls of sex segregated competitive sport.

Even when participants can biologically prove their place in women's sports, they are often denied the status of 'real' women, instead labeled as social deviants who do not, or cannot conform to ideal beauty standards (Lenskyj 1986). Many argue that sport participation has a masculinizing effect on women and girls, resulting in a deeper voice, the development of facial hair, and overdeveloped muscles (Griffin 2007). In addition to his myth of female frailty, Sabo (2007) also recognized and labeled this misconception as the myth of the "macho" female athlete—that playing sports makes women think, act, and feel like men.

In response to this belief, women must carefully balance muscularity and ideal beauty standards to avoid stigmatization (Dworkin and Messner 2002b). While increased muscularity benefits women's performance level in most sports, many women also express concern around being too big or muscular as compared to 'normal,' nonathletic women (Krane et al. 2007). George (2005) found that female collegiate soccer players defined the ideal body as "just the right amount of 'sexy, feminine' muscle" (2005: 317). These women were forced to negotiate multiple, oftentimes conflicting messages about their bodies from coaches (who have a large amount of control over players' diet, weight,

dress, and even personal lives), peers, parents (many of whom were supportive, but some also encouraged their daughters to be more feminine and to lose weight), and teammates.

Borrowing terminology from the literature on women and work, Dworkin (2001) likens this phenomenon to the glass ceiling of upward mobility faced by many women in the workplace. Approximately 75 percent of the 33 women interviewed from either an elite or middle-class gym expressed awareness of “an upper limit on the quest for seeking more muscular strength. This was expressed through a shared explicit fear of and repulsion to female bodybuilders’ bodies, a fear of becoming too big or bulky themselves, and narratives that focused on how to structure fitness practices so as to ensure (new definitions of) emphasized femininity” (Dworkin 2001: 337). Many women who engaged solely in cardiovascular workouts had lifted weights in the past and were aware that their bodies were *capable* of gaining muscles but *shouldn’t* (to conform to ideal beauty standards). Moderate lifters, who constituted 65 percent of Dworkin’s sample, carefully negotiated an upper limit to their physical strength by watching for signs of excess muscularity and then holding back in response. Dworkin’s analysis further underscores the ideological, rather than biological, root of women’s strength. Among her sample, the ceiling to women’s strength was guided by what women *should* do with their bodies, rather than any biological limit to their strength or size. The glass ceiling approach to weightlifting is relevant for scoring in women’s bodybuilding competitions. While male bodybuilders are judged by their ability to maximize muscle mass, female bodybuilders are forced to temper their physical size and musculature toward a “middle-of-the-road look” to score well by judges (Choi 1998; Lowe 1998). As

a result, women bodybuilders “aim to emphasize not their flex appeal but their sex appeal” (Choi 1998: 58).

The media also perpetuates this philosophy by focusing their attention on women who meet heterosexual, white beauty standards (e.g., Anna Kournikova and Jenny Thompson). Knight and Guiliano’s (2002) experimental research reveals the potential costs of sexualizing women athletes for women’s sports more broadly. They find that subjects preferred media accounts that focused on athleticism as opposed to athletes’ attractiveness. Athletes were seen as less talented, less aggressive, and less heroic when stories focused on their appearance. Heywood and Dworkin (2003) also find that action photos of women participating in sports consistently inspired the most sport participation among fifth and tenth grade girls (while sexualized photos were rated most attractive but least likely to inspire participation).

The third stigma affecting female participants is the belief that sports turn women into lesbians (Lenskyj 2003; Sabo 2007). Following World War II and the Great Depression, the stereotype of female sport participants as lesbians was widespread (Cahn 1993), and critics warned young girls and heterosexual women of the dangers of the disturbed mannish lesbian—depicted as a sexual predator—lurking in women’s sports (Griffin 2007). To this day, many collegiate and professional sports teams must deal with a lesbian “image problem” (Crosset 1995).

Some women's sports teams have adopted anti-lesbian policies and engaged in name-calling, taunting, harassment, and negative recruitment of prospective athletes.⁷ For example, former Pennsylvania State University basketball coach Maureen "Rene" Portland is well-known for her usage of multiple homophobic tactics. Portland publicly endorsed her infamous "no drinking, no drugs, no lesbians" policy, and commonly engaged in negative recruiting. In 2005, a former player, Jennifer Harris, accused Portland of dismissing her from the team because of her perceived lesbian sexual orientation, a case that was later settled out of court (Newhall and Buzuvis 2008). Despite a reluctance to address the issue, homophobia remains a major obstacle for *all* women in sports, and often creates rifts between heterosexual and lesbian women coaches, administrators, and participants (Lenskyj 2003; Theberge and Birrell 2007). Griffin (1998: 53) argues that this stereotype prevents women from forming a united front against sexism and discrimination, "ensuring that only men have access to the benefits of sport participation and the physical and psychological empowerment available in sport" (1998: 20).

Women sport participants are often viewed as inferior to men, stigmatized, and ignored or marginalized by the media because of sports' deep connection to masculinity in Western society. Because sport is considered masculine turf, women and girls who participate represent contested ideological terrain (Messner 1988; Theberge and Birrell 2007), and "*much cultural energy is still expended to reify female athletes as*

⁷ Negative recruitment refers to "warning" potential recruits and their parents or guardians of lesbian players, coaches, or administrators at other athletic programs. This practice plays off fears that lesbians are sexual predators and that athletic participation encourages lesbianism.

unequivocally heterosexual, as more suited to motherhood and nurturance ‘off the court,’ and as the categorically inferior athletes” (Dworkin and Messner 2002a: 348, emphasis added). Despite the unequal treatment outlined above, recent literature posits that athletic involvement, and physical activity more broadly, have the potential to empower women and girls (e.g., Garrett 2004). As Nancy Theberge (1981) wrote over three decades ago, despite the narrow view of sport within feminist scholarship as reproducing inequality and male dominance, sport should also be examined as a site of resistance for women (see also, Theberge 1985).

Physical Empowerment & Feminist Resistance

Women and girls who participate in sports are viewed as contested ideological terrain specifically *because* they challenge preexisting notions of what women can and should do with their bodies. In the past forty years, opportunities for girls to participate in sports have grown enormously, and the number of high school sport participants is currently at an all-time high. As shown in the following chapter (see Figure 2.1), girls comprised only seven percent of all U.S. high school sport participants in the 1971-72 academic school year. Today, girls make up nearly 42 percent of high school sports participants (National Federation of State High School Associations 2009).

While the number of male participants at the high school level continues to outstrip the total number of girls, the number of female athletes has increased over ten times, or 1000 percent, since the early 1970s. Much of this increase can be attributed to the passage of Title IX of the Education Amendments of 1972. Emerging from the Civil

Rights era, the legislation states that “No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance” (20 U.S.C. 1681).

Initially, the legislation received widespread support. Few public figures were willing, at least publicly, to argue that women should be denied equal access to federally funded educational institutions. Title IX became highly controversial, however, when questions were raised about the law’s application to sports. When it became clear that the law would indeed apply to all aspects of education, including athletics, opponents emerged to prevent the law’s passage. Some worried about the effect the legislation would have on men’s sports programs, while others simply objected to the need for athletic opportunities for women and girls. In 1974, for example, a Connecticut judge ruled that ‘athletic competition builds character in our boys. We do not need that kind of character in our girls, the women of tomorrow’ (Mitchell and Ennis 2007).⁸

At the collegiate level, the number of female athletes rose 372 percent in three decades (from 32,000 in 1971 to 150,000 in 2000) (McDonagh and Pappano 2007). In 1972, women represented 15 percent of athletes within NCAA member schools. In 2002, the proportion of women had risen to 42 percent (Carpenter and Acosta 2005). In addition to increases in women’s and girls’ participation rates, athletic budgets and access to facilities have also become more equitable. In the mid-1970s, an abundance of media

⁸ A more comprehensive review and analysis of Title IX, including a history of key legal decisions, can be found elsewhere (e.g., Mitchell and Ennis 2007; McDonagh and Pappano 2007; Suggs 2005).

stories depicted gross inequalities across the nation. A school in Waco, Texas, for example, spent more than \$250,000 on boys' sports but only \$950 on girls' sports (Mitchell and Ennis 2007). By 2002, women received 36 percent of sports operating dollars and 42 percent of athletic scholarships (a 133 million dollar deficit) nationwide (Carpenter and Acosta 2005).

The expansion of resources and opportunities for women and girls leads to the potential for sport to transform gender relations. Nancy Theberge (1985) argues that women are objectified and commodified through their sexuality. This oppression is challenged, however, when women are able to experience their bodies as strong, powerful, and free from male domination. In contrast to the glass ceiling described by Dworkin (2001), some contemporary women sport participants are abandoning narrow conceptions of femininity and embracing their more muscular and powerful bodies (e.g., Broad 2002; Chase 2006). Through in-depth interviews with 52 larger female athletes in strength-and-power based sports, many of whom were considered overweight or obese by quantitative constructs such as the body mass index (BMI), Scott-Dixon (2008) discovered that many women indeed shared experiences of being judged and labeled as fat by mainstream standards. Yet many of these women invoked their own definitions of fitness and fatness distinct from the social ideal, generally endorsing "a much wider range of bodies as fit and rarely linked fat explicitly to weight alone" (2008: 36). She concludes that "women derive immense personal, physical, and political benefits from participation in these activities. They are 'doing strong' rather than 'being thin'" (Scott-Dixon 2008:

42). As Roth and Basow proclaim, “If women stop being weak, the basis for the traditional definition of sexuality collapses” (2004: 256).

Turning to adolescence, young (often white, middle class) girls are internalizing the liberal feminist message that anything is possible (Cooky and McDonald 2005; Duncan 2007). Though past research suggests that girls who participate in gender-appropriate sports, such as tennis or gymnastics, hold greater social status by their peers than those who participate in masculine sports (Holland and Andre 1994), future research is needed to test whether this trend has continued among contemporary cohorts. Adams and colleagues report a rise in the number of girls who embrace a “tomboy” identity, allowing them to “play sports, have a boyfriend or not, resist girly markers like makeup and ribbons, skirt questions about sexual identity, and still find acceptance with their peers” (Adams, Schmitke, and Franklin 2005: 29). Although girls’ and women’s participation has not yet led to a feminist liberation, the rise in “tomboy” identity described by Adams and colleagues may reflect a shift in the meaning of contemporary femininity to include physical activity and athleticism.

Girls’ high school sports increasingly resemble the masculine, professionalized model that is prevalent in boys’ sports opportunities. This win-at-all-costs mentality, a key component in the shift toward achievement-striving in sports (Dunning 2010), is also increasingly prevalent in collegiate sports as well. In 2009, for example, University of Oklahoma basketball star Courtney Paris sparked controversy when she announced she would repay her entire collegiate scholarship if the Sooners did not win the national

championship (Longman 2009). For Paris, fulfillment of her scholarship obligations meant not only playing basketball for four years, but also winning the title.

For some, this is one of the great ironies of Title IX. While the legislation's opponents were adamant that the legislation would ruin men's sports, Title IX has, instead, changed the nature of women's sports. To be sure, the National Collegiate Athletic Association (NCAA) brought resources and opportunities to women's sports (e.g., media coverage and scholarship dollars) that were not available prior to the passage of Title IX (Hult 1994)⁹. At the same time, however, many find it tragic that female sports have been sucked into the heavily commercialized, corrupt, and masculine model of high performance sport, which Suggs (2005: 175) describes as a "nakedly commercial enterprise." This professionalization means that many young girls and women face the same dangers as male participants (Dworkin and Messner 2002b), including the use of anabolic steroids or other performance enhancing drugs, commercial and media exploitation, and greater pressure to forego proper treatment for injuries.

As boys' and girls' sports become increasingly similar, some question whether Title IX is needed any longer. While participation rates may not be equal, girls' interest in sport may be satisfied by today's opportunities. Liberal feminists' hope, "as culminated in the passage of Title IX in 1972, was that if women could crack the world of sports, then patriarchy, which manifests both literally and symbolically in the sporting institution, could be dented" (Adams, Schmitke, and Franklin 2005: 18). Many feminists,

⁹ See Suggs (2005) for a critical analysis of the transition of women's collegiate sport governance from the Association for Intercollegiate Athletics for Women (AIAW) to the NCAA.

however, are reluctant to abandon initiatives aimed to equalize sport opportunities and experiences between the sexes, and warn that girls' and women's sports are still seen as culturally inferior; therefore, their status as athletes is still rather precarious in the post-Title IX era. Attitudes toward female athletes may be increasingly ambivalent, but they are still not universally positive.

Research Questions, Contributions, and Logic of Analysis

Female sport participants continue to represent contested ideological terrain. Women athletes and sports are trivialized and marginalized by mainstream media, and various institutional and cultural barriers are used to limit girls' and women's full participation. At the same time, the unfaltering presence of women and girls within sport, and the benefits of sport for women's empowerment and physical liberation, challenge patriarchal gender structures. For better or worse, female athletes, like their male counterparts, are competing in highly competitive, 'masculine' models of sport, and have no intentions of abandoning ship in the foreseeable future. The "Generation X" youth represented in this study saw massive expansion in athletic opportunities for women and girls throughout their childhood and adolescence. What remains to be seen, however, is how today's youth, far removed from the Title IX battles fought by their mothers and grandmothers, will experience sport, and what effect sport participation will have on their futures.

Given the deep link between sport and masculinity described above, there is reason to expect participation in this gendered institution to affect girls' performance and

aspirations in other realms. Despite tremendous obstacles, some women are able to earn high salaries, work as CEOs or obtain other top leadership positions, and gain the respect of their colleagues in masculine or male-dominated fields. In order to combat patriarchal arrangements between men and women, it is important for women to be independent and obtain steady, reliable jobs if they so choose. How are women able to navigate young adult work, and gendered institutions more broadly?

In this study, I examine how participation in one highly gendered institution during adolescence (i.e., sport) affects later participation in masculine institutions during young adulthood (i.e., work). Specifically, I use longitudinal survey data from the Youth Development Study (YDS) to test whether high school sport participation is associated with the following work outcomes during young adulthood: labor force participation, occupational location, industry sex ratio, logged biweekly earnings, logged annual household income, supervisory authority, and neo-Marxian social class category. Moreover, I conduct in-depth interviews with nine women who participated in high school sports to better understand how sport may affect young adult work and women's lives more generally.

This research is attentive to how the effects of high school sport participation differ for males and females. First, sport participation may benefit boys more than girls. Most high school athletics are sex segregated, and girls' sports are culturally viewed as inferior to boys'. As boys' sports receive heightened visibility and respect, boys may be more likely to receive and internalize the norms and values reinforced through sport. Moreover,

socialization through sport may do little to combat the gender discrimination and other forms of inequality experienced by many working women.

Second, sport participation—particularly involvement in masculine-typed sports—may challenge conventional gender norms for girls, who often learn to be docile and timid with their bodies in other institutions and activities. Because sport socialization is consistent with the values and norms that boys learn in other realms, participation may be less impactful for boys as compared to girls. Moreover, increased workplace responsibility and work in male-dominated fields may be perceived as more achievable and socially acceptable for women who participate in high school sports.

Lastly, it is possible that sport participation may produce similar effects for both boys and girls. While some sports or coaches apply a radical feminist model that promotes inclusivity rather than competition and elitism (Lenskyj 2003), most sports and leagues aimed at girls promote masculine values. As the skill level of women's and girls' sports continues to rise, they also have become increasingly competitive and physical. As girls' sports increasingly resemble boys' outcomes, for better or worse, may be consistent regardless of sex.

This mixed methods study provides the best evidence to date on the effects of high school sport participation for young adult work outcomes. The longitudinal nature of the YDS allows for the use of innovative methodological techniques (multi-level modeling) that are able to control for pre-existing characteristics, such as race or family socioeconomic status, as well as changes in educational attainment, family characteristics, and other important covariates throughout young adulthood. Moreover,

this analysis considers the effects of sport in the post-Title IX context. As discussed in the next chapter, YDS respondents participated in high school sports in the late 1980s and early 1990s, allowing me to measure the relationship between sport and work for contemporary cohorts. With the passage of Title IX in 1972 and mandatory compliance date of 1978 for colleges and secondary schools, this marks the first generation of girls who could participate in youth sports with the full expectation of continued opportunities at the high school and collegiate levels. This analysis will also provide empirical evidence for current debates regarding the continued necessity, or futility, of Title IX today.

This study has significant implications for understanding links between gendered institutions across the life course. Surprisingly, research on gender and work, as well as attainment more generally, is often silent on this issue. While much attention has been devoted to how women balance the demands of work and family, little attention has been given to how the norms, values, and expectations of adolescent activities can affect career trajectories. If adolescent sport participation empowers participants, especially girls, to succeed in young adult work, this relationship could provide insight into how women can overcome gender inequality.

In the following chapter, I describe my data and methodology in greater detail. In Chapter 3, I consider the issue of selection into sport. Before considering relationships between sport and work, it is important to understand whether and how participants differ from their peers prior to the high school years. The results of my quantitative analyses predicting work outcomes are then presented in Chapter 4 and Chapter 5. Specifically,

Chapter 4 discusses the results of bivariate analyses, as well as multivariate models predicting labor force participation, occupational or job categories, and industry sex ratio. Analyses predicting educational attainment, logged biweekly earnings, logged annual household income, supervisory authority, and neo-Marxian social class category are presented in Chapter 5. Next, I analyze my qualitative data in Chapter 6, explaining the impact of sport in women's adolescent and young adult lives. I present my conclusions from this study and plans for future research in Chapter 7.

CHAPTER 2: DATA, MEASUREMENT, AND ANALYTIC STRATEGY

This study utilizes a mixed methods approach, combining survey data from the Youth Development Study (YDS) with in-depth interviews. In this chapter, I outline the data and methods used to conduct this research. I first discuss the design and administration of the YDS, followed by a description of the quantitative measures used to conduct my analyses of gender, sport, and work. Next, I describe the descriptive and multivariate techniques used in the quantitative analyses presented in my quantitative empirical chapters. I end this chapter with a discussion of in-depth interviews conducted with a subsample of YDS women, now in their late thirties, who participated in high school sports.

Youth Development Study

The Youth Development Study¹⁰ is a longitudinal cohort study of St. Paul, Minnesota youth. The primary goal of the YDS is to examine youth's attitudes and experiences surrounding work, and how work—as well as volunteering and other formative experiences in adolescence—influence mental health, socioeconomic attainment, and a number of other outcomes during the transition to young adulthood. The study began in 1988, when respondents were ninth graders in the St. Paul public

¹⁰ The YDS is currently supported by the National Institute of Child Health and Human Development (HD44138), “Work Experiences and Mental Health: A Panel Study of Youth,” and was previously funded by the National Institute of Mental Health (MH42843). Survey waves through 2004 are available through the Inter-University Consortium for Political and Social Research (ICPSR), accessible at <http://dx.doi.org/10.3886/ICPSR24881.v1>. More information about the study can be obtained from Jeylan T. Mortimer (morti002@umn.edu), Principal Investigator. Requests for individual papers from the study should be sent to lcc@soc.umn.edu.

school system. In the fall of 1987, invitations to participate in the study, along with a letter of endorsement from the research director of the St. Paul Schools, were sent to a random sample of students and to their parent or guardian. To be eligible for the study, students had to be enrolled in the school district at the time of data collection and free of any disability (e.g., blindness) that would prevent them from filling out the questionnaire. Using the “active consent” process, both adolescents and their parent or guardian were required to each sign a consent form in order to participate in the study.

Of the 1,779 randomly drawn cases, 1,139 (64 percent) consented to participate in the study and 1,105 students completed questionnaires during the first survey wave in the spring of 1988. Further analyses conducted at the onset of the study suggested that those who participated in the study were similar to non-participants in key socio-economic and individual-level characteristics; girls and younger students, however, were somewhat more likely to participate (Mortimer 2003: 240-241). For the purposes of this study, I exclude 105 Hmong respondents. Because the Hmong are a recent immigrant group (arriving in the Twin Cities metropolitan area during the decade before the study began) with limited English language proficiency, consent and data collection procedures differed from those utilized for other youth, and data obtained from Hmong and non-Hmong respondents differed in many respects. Moreover, non-response in the base year and attrition throughout the study period were markedly higher among Hmong respondents. This resulted in an initial sample size of 1,000 respondents.

While the initial panel was concluded to be representative of the total population of ninth graders attending St. Paul public schools (Mortimer 2003), students’ sport

experiences and opportunities in private, magnet, or special needs schools may vary tremendously. While my research findings may not generalize to all youth, the overwhelming majority of students in grades 9-12 attend public schools (National Center for Education Statistics 2012). Moreover, in 1990 the Twin Cities metropolitan area was ranked sixteenth in population size among U.S. urban areas (U.S. Census Bureau 2003), and St. Paul had a population of over 272,000 (U.S. Census Bureau 1995). Sport experiences, as well as job opportunities and outcomes, may also differ for youth in rural communities or in other regions of the United States.

With few exceptions¹¹, YDS respondents were surveyed annually through 2011, when most respondents were 37-38 years old. During the first four years of the study (1988-1991), surveys were administered in classrooms. Respondents who were absent, had moved to another school district, were institutionalized, or were no longer attending school completed surveys by mail. Those who did not respond to the mailing were contacted by phone and were offered the opportunity to have their surveys administered in person. All surveys were administered by mail from 1993 to present. As shown in Table 2.1, survey retention remained high throughout the typical high school years: 92 percent completed surveys during most respondents' senior year of high school. Though survey attrition increases over time, 71 percent of respondents completed questionnaires in 2007, the latest survey year utilized in this analysis. The YDS retention rate is comparable to, or exceeds, other longitudinal studies of this nature (Alexander, Somerfield, Ensminger, Johnson, and Kim 1993; Reynolds and Baird 2010).

¹¹ As shown in Table 2.1, surveys were *not* administered in 1996, 2001, 2006, 2008, and 2010.

Table 2.1 Survey Retention Chart

Wave	Year	Age	# of Respondents	Response Rate
1	1988	14-15	1000*	99.0%
2	1989	15-16	965	95.5%
3	1990	16-17	957	94.8%
4	1991	17-18	932	92.3%
5	1992	18-19	816	80.8%
6	1993	19-20	781	77.3%
7	1994	20-21	799	79.1%
8	1995	21-22	780	77.2%
9	1997	23-24	788	78.0%
10	1998	24-25	760	75.2%
11	1999	25-26	726	71.9%
12	2000	26-27	760	75.2%
13	2002	28-29	721	71.4%
14	2003	29-30	711	70.4%
15	2004	30-31	735	72.8%
16	2005	31-32	711	70.4%
17	2007	33-34	713	70.6%
18	2009	35-36	670	66.3%
19	2011	37-38	653	64.7%

* 1,010 youth (with the permission of a parent/guardian) consented to participate.

For each of the first seven survey waves (through 1994), respondents were compensated ten dollars for their participation in the study. In an effort to maximize participation, a number of additional incentives have been provided over the years (e.g., including a Youth Development Study pen with the questionnaire). The payment for participation increased from \$10 to \$20 in 1995 (age 21-22), from \$20 to \$40 in 2000 (age 26-27), and from \$40 to \$50 in 2002 (age 28-29). Retention is higher among youth from more advantaged backgrounds.¹²

During wave 1 and wave 4—most students’ freshman and senior years of high school—respondents’ parents were also surveyed in order to obtain information on

¹² A more detailed comparison of those who remain in the study and those who leave the study can be found in Mortimer’s *Working and Growing Up in America* (2000: 37-43).

Table 2.2 Sampling of YDS Respondents' Parent(s)

	1988	1991
# Mothers responding	924	690
# Fathers responding	649	440
% YDS Respondents Represented	95.9%	79.1%

family characteristics, social class position, and parents' relevant attitudes and expectations. As shown in Table 2.2, 96 percent of youth had at least one parent complete the survey in wave 1 and 79 percent of respondents in wave 4. In the present analysis, this information is used to obtain parental education and income (described below).

The longitudinal cohort design of the YDS offers several advantages for this analysis. First, all respondents are roughly the same age, establishing their careers within the same economic and political climate. As a result, age, period, and cohort effects are held constant in this analysis. Second, all originate from the same urban area. Though variability in factors such as socioeconomic attainment and opportunities for sport participation exist within St. Paul public schools, the results are not complicated by regional differences between rural and urban communities. Moreover, the majority of respondents continue to reside within the Twin Cities metro area and are subject to the same local labor market contexts (such as unemployment rate, union strength, and other local opportunity structures) that have been linked to work outcomes and other forms of socioeconomic attainment (e.g., Bibb and Form 1977; Flynn 2003). Future research is needed to test whether these findings may be generalized across age, period, cohort, and region. In the following section, I describe the measures constructed from the YDS survey data that are used in my quantitative analyses.

Quantitative Measures

High School Sport Participation

In contemporary scholarship, there is little agreement as to which activities constitute “real” sports. The proper classification of activities such as auto racing, dance, and skateboarding, for example, often sparks tense debate among academics and sports enthusiasts alike. The legal system has even recently intervened to determine whether participants in competitive cheerleading at Quinnipiac University can be counted toward the school’s Title IX compliance (Thomas 2010). Many scholars identify sports as “well-established, officially governed competitive physical activities in which participants are motivated by internal and external rewards” (Coakley 2001: 6). This definition has been critiqued, however, for ignoring physical activities that are not formally organized or widely recognized, and for failing to take into consideration variation over time and place. Nevertheless, when considering the effects of sport for participants, it is important to use a precise definition of sport.

In 2000 (age 26-27), YDS respondents answered a series of retrospective questions about their participation in sports during high school, not including physical education classes. Respondents who reported participating in sports were then asked to write the name of the sport (capped at six) and to indicate the level(s) of participation, including (1) school-sponsored varsity or junior varsity teams; (2) school-based intramural or club teams; (3) community based teams or leagues; and/or (4) informal recreational or personal fitness. A total of 757 respondents reported their high school sport participation at that time, corresponding to a retention rate of 75.8 percent.

By allowing individuals to determine for themselves which activities are sports, these data provide wide-ranging activities from basketball or football to hacky sack, jogging, and yoga. For the purposes of this project, I excluded ten physical activities that were listed by respondents as informal recreation or personal fitness and were not reported at any other level: biking, billiards, fishing, hacky sack, hunting, jogging, racquetball, rollerblading, skateboarding, and yoga. In other words, these activities were not listed by any of the YDS respondents as school-sponsored or community-based sports. I retained “aerobics” as a sport in subsequent analyses because one student participated in a school-based intramural or club aerobics team. I also excluded one report of color guard and swim team manager, respectively, as non-sports. In most cases, however, such activities were listed in conjunction with more traditional sports and my decision to exclude the above activities rarely altered respondents’ status as sport participants. The complete list of “sports” identified by all YDS respondents is shown in Table 2.3.

As shown in Table 2.4, 54 percent of YDS respondents participated in high school sports (59 percent of males and 51 percent of females). Past research on sport participation often examines the effects of high school varsity sports only, largely ignoring the contexts of sport participation. In addition to testing whether *any* high school sport participation influences work outcomes, I also examine whether participation in certain *types* of sports are associated with young adults’ careers.

Table 2.3 List of Contact and Non-Contact Sports Reported by YDS Participants

Aerobics [#]	Fencing*	Soccer* [#]
Badminton	Figure Skating	Softball [#]
Baseball [#]	Floor Hockey* [#]	Swimming/Diving
Basketball* [#]	Football* [#]	Synchronized Swimming [#]
Boot Hockey* [#]	Golf	Tennis
Bowling	Gymnastics	Track and Field
Boxing*	Ice Hockey* [#]	Triathlon
Broomball* [#]	Ice Skating	Volleyball [#]
Cheerleading [#]	Martial Arts*	Weightlifting
Cross-Country/Running	Powderpuff Football* [#]	Wrestling*
Dance [#]	Skiing	

* Denotes “contact” sports (all others are coded as “non-contact” sports).

[#] Denotes team sports (all others are coded as individual sports).

As community- or church-organized teams and leagues are often less competitive and less visible to the wider community, it is reasonable to expect that such activities may be less formative for the youth who participate exclusively at this level. At the same time, some sport opportunities organized by institutions other than schools (e.g., Junior Olympics programs) may offer opportunities for more competitive play. Even neighborhood pick-up basketball or other similarly organized sports may be associated with unique outcomes. Research on Midnight Basketball Leagues, for example, suggests that some community-organized sport opportunities provide an alternative safe space for youth and young adults during periods where youth may be most inclined to participate in deviant behavior (Hartmann 2001). Moreover as schools often require students to maintain a given academic performance, attendance record, or conform with other school policies in order to participate, informal participation may offer benefits for the most disadvantaged youth. In subsequent analyses, I distinguish between formal participation (i.e., school-sponsored varsity or junior varsity teams) and informal participation (i.e.,

Table 2.4 Descriptive Statistics of YDS Sample

	Description	Mean	S.D.
<i>Sport Participation</i>			
Any Sport Participation	any high school sport participation	.541	
“Formal” Sport	varsity/junior varsity sport	.466	
“Informal” Sport	informal recreation/personal fitness	.167	
Team Sport(s)	participation in team sport	.417	
Individual Sport(s)	participation in individual sport	.346	
Contact Sport(s)	participation in any contact sport	.309	
Non-Contact Sport(s)	non-contact sport participation only	.450	
<i>Work Outcomes</i>			
Labor Force Participation	are you currently employed? (1=yes)	.849	
Occupational Category	occupation of primary job	-----	-----
Industry Sex Ratio	proportion female in industry	.497	21.226
Logged Biweekly Earnings	natural log of biweekly earnings	6.879	.801
Logged Household Income	natural log of annual household income (2001-2008)	10.662	1.417
Supervisory Authority	do you supervise others? (1=yes)	.307	
Marxian Class Category	neo-Marxian social class category	-----	-----
<i>Demographic Characteristics</i>			
White	racial category (1=white)	.758	
Female	biological sex (1=female)	.523	
Parental Education	parents’ education, range 10-20	14.012	2.418
Family Income	parents’ household income (1988) in \$10,000s	3.443	2.081
Number of Siblings	continuous measure of family size	1.158	1.162
<i>High School Characteristics</i>			
Closeness to Mother	closeness to mother in high school	11.518	2.488
Closeness to Father	closeness to father in high school	9.562	2.724
Control Orientation	control orientation index, range 7-28	20.104	3.064
Grade Point Average	current GPA (1988-89), range 1-12	7.467	2.408
<i>Young Adult Characteristics</i>			
Partner (Full-Time Work)	spouse/cohabiting partner works full-time (reference category)	.422	
Partner (Not Full-Time)	spouse/partner does not work full-time	.144	
Single	single (not married or cohabiting)	.434	
Children	do you have children? (1=yes)	.486	
School Attendance	attended school in past year	.316	
Work Hours	weekly self-reported work hours	38.073	10.092
Educational Attainment	years of education, range 10-12	14.020	1.782

school-sponsored intramural or club teams, community-based teams or leagues, and informal recreational or personal fitness). Nearly half of all YDS respondents, 47 percent, and the overwhelming majority of high school sport participants, 90 percent, indicated playing at least one sport at the varsity or junior varsity level.¹³ Surprisingly, only 5 percent of all YDS respondents reported informal sport participation in the absence of varsity or junior varsity participation during the high school years.

Next, I examine whether certain *types* of sports are differentially associated with work outcomes. I distinguish between (1) team and individual sports and (2) contact and non-contact sports. Team sports and individual sports may foster different qualities among participants. Team sport participants must work together in order to be successful while individual sport participants must learn to perform independently. Both of these attributes are often necessary in the labor market. Sports were classified as “individual sports” if participants are able to compete alone, even if the sport may contain a team element. For example, some sports allow teams to compete as doubles (e.g., tennis or figure skating) or in relays (e.g., swimming or track and field), or involve competitions that total individual scores across an entire squad (e.g., gymnastics or wrestling). Still, such sports were coded as individual sports because coordination with teammates is not a required element of the sport. As shown in Table 2.4, team sports were somewhat more

¹³ Of those who participated in sports during the high school years, 68 percent listed formal participation only, 10 percent participated only at the informal level, and 22 percent participated at both levels (not shown, available by request).

popular than individual sports: 42 percent of YDS respondents participated in team sports as compared to a 35 percent participation rate for individual sports.¹⁴

Sports were labeled as “contact” or “non-contact” sports based on the frequency and level of contact and physicality among opponents. For example, sports such as tennis, swimming, or track and field, where opponents are separated by a net or lane, are labeled as non-contact sports. Sports that allow a modest level of contact (e.g., baseball or softball), but only in very specific circumstances (e.g., when a fielder attempts to “tag” an opponent during base-running), are coded as “non-contact” sports.¹⁵ Those activities coded as contact sports are denoted by an asterisk in Table 2.3. As shown in Table 2.4, non-contact sports were more popular among YDS respondents during the high school years, though 40 percent of sport participants were involved in both types of sports.

These numbers mask dramatic sex differences, however, as boys are much more likely to participate in contact sports. While 82 percent of male high school sport participants played contact sports, only 35 percent of female participants played contact sports ($p < .001$). In contrast, 74 percent of male sport participants were involved in non-contact sports as compared to 91 percent of female sport participants ($p < .001$). Models

¹⁴ The most common scenario among high school sports participants involved participation in both team and individual sports (41 percent), followed by team sport participation only (36 percent) and then individual sport participation (23 percent). Females were less likely than males to participate in both team and individual sports (36 percent versus 47 percent of high school sport participants). This difference is partially driven by the finding that males, on average, participate in a larger number of sports as compared to female respondents.

¹⁵ The list of “contact” and “non-contact” sports generated by this coding scheme is comparable to past research. While some past studies also distinguish between “contact” and “collision” sports (e.g., Tucker and Parks 2001), these categories are combined due to limited participation in “collision” sports among females in the YDS sample.

that estimate the effects of contact sport participation for females' careers have important implications for workplace sex inequality. High school girls who transgress gender boundaries by participating in masculine, contact sports may be particularly willing to pursue paid work in masculine-typed occupations and industries, and may be more likely to obtain supervisory roles. At the same time, they may be more likely to face backlash for not conforming to gendered expectations of femininity.

Isolating these specific effects is useful for understanding *why* sport participation is associated with work outcomes. If the relationship between high school sport participation and work outcomes are universal, regardless of the level of play or sport type, then interventions through sport need not be narrowly focused on schools or particular types of sports. If, on the other hand, effects are limited to the most highly visible, competitive, or physical sports, or those that require youth to work together in teams in order to be successful, then researchers and practitioners can better understand the mechanisms through which sport influences young adult choices and opportunities.

Young Adult Work Outcomes

In Chapter 4 and Chapter 5, I examine the relationship between high school sport participation and the following work outcomes: labor force participation, occupational category, industry sex ratio, individual earnings, household income, supervisory authority, and neo-Marxian class category.

Labor Force Participation. Before exploring the various aspects of young adults' careers, it is crucial to determine whether high school sport participation is related to

labor force participation. Estimates of other work outcomes, such as earnings or industry sex ratio, may be biased if they fail to consider possible selection effects into the labor force. Each survey wave during young adulthood (age 21 to 34), YDS respondents report whether they are currently employed at the time of survey administration. Some respondents who are not currently employed report employment in the past 12 months; however, I consider *current* employment status only for this outcome. As shown in Table 2.4, 84 percent of YDS respondents were employed across all person-years from 1995 through 2007.

Occupation & Industry. I next examine whether sport participation is associated with the types of young adult work. On each questionnaire, respondents are asked a series of questions about all jobs held since the last survey was administered, typically a twelve month period. Respondents report their job title, name of the organization where they are employed, their weekly work hours, pay rate, any tips, bonuses, or commission, and the start and end date for each job. Respondents are also instructed to write “still employed” for each current job. A de-identified questionnaire (Figure 2.1) is included as a reference. Respondents who are currently employed in multiple jobs are then prompted to identify which job they consider to be their “primary” job, and are asked a series of questions relating to this work (e.g., how they located their primary job, training, daily activities, relationships with co-workers, etc.).¹⁶

As Figure 2.1 shows, employment histories are often quite complex. This particular respondent worked for seven separate employers within a one-year period in his/her late

¹⁶ A complete list of questions asked at each survey wave is available at http://www.soc.umn.edu/research/yds/OriginalR/YDScrosswaveCodebook_Ori.html.

Figure 2.1 De-Identified Example of YDS Work History

D5 For each job you have held (part-time and full-time) since July of 2002, please fill in the chart:

- Please indicate how you are paid (dollars per hour, day, week, month or year). Indicate before tax earnings (e.g. \$8.75 per hour or \$18,000 per year).
- If your job changed between part-time (less than 35 hours per week) and full-time, please list each time period on a separate line.
- Include jobs that started prior to July of 2002, but continued after that date.
- If you are currently working at a job, write "still employed" in the end date column.

JOB TITLE	NAME OF ORGANIZATION	HOURS PER WEEK	PAY RATE	TIPS/ BONUSES/ COMMISSION	DATES	
					STARTED Month/Year	ENDED Month/Year
PLEASE DO NOT ABBREVIATE	PLEASE DO NOT ABBREVIATE					
EXAMPLE 1: Cashier	Al's Corner Market	15	\$8.25 per hour	NA	AUGUST 1999	STILL EMPLOYED
EXAMPLE 2: Real Estate Agent	Ace Realty	40	\$30,000 per year	\$100 per week	JANUARY 2002	AUGUST 2003
job 1: Clinical Study Coordinator	XXXXXXXXXX	40	16.95/hr	NONE	JAN 2002	JAN 2003
job 2: Administrative Assistant	XXXXXXXXXX	22	12.50/hr	NONE	March 2003	April 2003
job 3: Crew Leader	XXXXXXXXXX	35	14.00/hr	NONE	April 2003	JUN 2003
job 4: Landscaper	XXXXXXXXXX	25	12.00 17.00 20.00/hr	NONE	MAY 2003	SEP 2003
job 5: Wholesale Salesperson	XXXXXXXXXX	40	11.00/hr	NONE	SEP 2003	OCT 2003
job 6: "	XXXXXXXXXX	24	"	"	OCT 2003	NOV 2003

Caterer

15

12.00

NONE

OCT 2003

NOV 2003 still employed

Landscaper

16

13.25

NONE

OCT 2003

still employed

twenties. He/she worked 40 hours per week for a full year as a clinical study coordinator before holding a series of part-time or short-term work. At the time of survey administration, he/she held two concurrent jobs, working 15 hours per week as a caterer and 16 hours per week as a landscaper. The respondent lists the current work as a landscaper as his/her primary job.

Making sense of these data to assign a single occupation and industry proved to be a tedious task. Respondents were not prompted to list their primary job until the 2000 survey wave. In cases where respondents listed more than one current job in the 1995-1999 survey years—as well as any 2000-2007 surveys where respondents opted not to identify their primary job—I used the following decision rules to determine primary job:

1. *Current* job with the highest number of hours. In the event of a tie...
2. *Current* job with the highest pay rate. In the event of a tie...
3. *Current* job with the longest tenure.

In the case illustrated in Figure 2.1, this system would have correctly identified the respondent's landscaping job as their primary job. The job title of respondents' primary job (e.g., landscaper) was used to determine the relevant occupational sector. Using the U.S. Census classification system (U.S. Census Bureau 2003), research assistants entered the corresponding three-digit code for each occupation category during the data entry process. From 1995-2000 the YDS used 1990 occupation codes, which were replaced by U.S. Census 2000 occupation codes in 2002 (see U.S. Census Bureau 2003 for a detailed comparison of the 1990 and 2000 occupational coding). Job categories were standardized and then collapsed to create four mutually exclusive categories: managers, officials, and professionals; service; technical, sales, and administrative support; and craft, operatives, laborers, and helpers. For all person-years from 1995 through 2007, males' primary job was most likely to be as craft, operatives, laborers, and helpers (33 percent of workers) while females were most likely to report technical, sales, and administrative support positions as their primary job (41 percent of those currently employed).

Research assistants for the Youth Development Study also cross-referenced the name of the organization or employer¹⁷ (e.g., "Al's Corner Market" and "Ace Realty" in Figure 2.1) and included an additional variable containing a 3-digit industry code for each

¹⁷ This information is removed from Figure 2.1 to protect respondents' identity.

listed job. Using publicly available data¹⁸ on the year-specific industry sex ratio for each industry code, I created a new variable that includes the percentage of workers in respondents' primary job industry that are female in the entire U.S. labor force. As with occupational codes, the YDS included 1990 U.S. Census industry codes from 1995-2000 and 2000 U.S. Census industry codes from 2002-2007 (U.S. Census Bureau 2003). As expected, the percentage of female workers in respondents' primary job industry was higher among females than among males: 57 percent versus 40 percent, respectively.

Biweekly Earnings & Household Income. I next examine whether sport participation is associated with greater socioeconomic attainment. In addition to the work information shown in Figure 2.1, YDS respondents are also asked to provide the total amount of money earned in the last two weeks prior to tax deductions. During some waves of data collections, respondents were given the option of reporting a high and low estimate of earnings. In such cases, a mean dollar amount was calculated. Earnings were then transformed into logged earnings in order to adjust for outliers. The mean logged biweekly earnings across all person-years from 1995-2007, excluding zero earners, is \$1,355.52, corresponding to an annual salary slightly greater than \$35,000.

As an alternative to logged biweekly earnings, I also measure annual household income during the later years of young adulthood. This outcome more clearly measures the total financial resources available at the household level, and provides a more stable

¹⁸ For more recent survey waves (2003-2007), industry sex ratio was retrieved from the U.S. Department of Labor (2013). The proportion female within detailed industries for older waves (1995-2002) was retrieved from the FRASER Federal Reserve Archive (2013). The percentage of female workers in each detailed industry was not available in 2000; therefore, I rely on national percentages reported in 1999 for data obtained from YDS respondents in both 1999 and 2000.

measure of economic attainment in cases where there is large fluctuation in biweekly earnings. Beginning in 2002, when most were 28 or 29 years old, YDS respondents were asked to report the income for their entire household during the previous year.¹⁹ For example, in 2004, YDS respondents reported their total household income earned in 2003. In multivariate analyses, I account for this lagged structure by matching covariates to the appropriate annual income. In the example above, 2003 covariates (e.g., relationship status, weekly work hours, etc.) predict 2003 annual income, as reported by respondents in 2004. When surveys were administered biennially (2000-2002, 2005-2007, 2007-2009), covariates predict the household income for the following year (e.g., 2000 covariates predict 2001 household income as reported by respondents in 2002).

This strategy resulted in annual household data for six survey waves (spanning 2001 through 2008), which were predicted by covariates measured from 2000 through 2007. As with individual earnings, a mean dollar amount was calculated for cases where an income range was provided by the respondent. Household income was then transformed into logged household income after adding one dollar to the total household income in order to retain zero earners. The mean annual household income before taxes increases steadily over time, ranging from \$47,000 in 2001 to \$73,500 in 2008.

Workplace Power & Authority. The previous work measures address young adults' occupational field, industry sex composition, and economic success, but fail to consider

¹⁹ YDS respondents also reported their previous year's annual income each year of survey collection from 1995 through 2000. In 2002, the wording of this question was altered to include other household members. As the mean reported income increased dramatically as a result of this change (increasing from approximately \$28,000 in 1999 to \$47,000 in 2001), I limit my analyses of annual household income to the latter survey period.

respondents' position relative to the means of production. This study employs two additional measures of workplace power and authority: supervisory authority and neo-Marxian class category. At each survey wave during young adulthood, YDS respondents are asked, "*Do you supervise other workers on your primary job?*" Supervisory authority (coded as "1") is measured as a dichotomous outcome. As shown in Table 2.4, approximately 31 percent of those employed supervised at least one other worker (35 percent of males and 27 percent of females).

A more nuanced approach is to consider workers' relation to the means of production. Social class can be measured using organizational position relative to other workers as well as control of the means of production and relationship to labor power. This neo-Marxian measure of class was developed by Hagan and colleagues (1985) and has been previously used to analyze YDS data (Uggen 2000). This measure is limited to the five survey years (2002-2007) in which all four questions are asked of respondents. The following questions are used to construct five neo-Marxian class categories:

1. *Are you currently employed?*
2. *Are you self-employed?*
3. *Do you supervise other workers on your primary job?*
4. *What was your income for your entire household this past year (before taxes)?*

Respondents are classified as "employers" if they are self-employed and supervise other workers (2 percent of respondents). Respondents are classified as "petite bourgeoisie" if they are self-employed but do not supervise others (5 percent). "Managers" supervise others but are also employed by others (25 percent). "Workers" are employed by others

and do not hold supervisory authority (51 percent). Lastly, “surplus population” is composed of individuals who are unemployed or report a household income less than ten thousand U.S. dollars (18 percent).

Demographic Characteristics

Race and Sex. All models also include a dichotomous variable for racial identity (whites coded as “1” and non-whites coded as “0”) and sex (females coded as “1” and males coded as “0”), except where models are run separately by sex. Approximately 76 percent of the analytic sample identified as white, while 52 percent were female (see Table 2.4).

Family Social Class. Consistent with classic attainment models, I include parental education and family income as measures of socioeconomic status of respondents’ family of origin. In her study of students attending a suburban California high school in 1981, Hasbrook (1996) finds that females from more advantaged backgrounds were more likely to participate in sports, while male participation rates were similar regardless of their social class background. Turning to my work outcomes, past research also suggests that young adults from more advantaged families are more likely to work (Farré & Vella 2007), aspire to more high-return, high-risk “entrepreneurial” positions (Halaby 2003), and achieve greater occupational and socioeconomic attainment (e.g., Blau and Duncan 1967; Rumberger 1983). Respondents’ parents reported their highest degree earned and combined household income in wave 1 of the study (1988). Parental education was recoded to correspond to years of education, and ranged from “less than high school”

(coded as 10) to “Ph.D. or Professional Degree” (coded as 20). In cases where two parents or guardians responded to the survey, the highest educational attainment was used. As shown in Table 2.4, the mean years of education among YDS participants’ most highly educated responding parent was 14 years, corresponding to “some college.”

Family income is also measured in the baseline year. Parents were each asked to report the income category that best reflected their annual household income (e.g., “under \$5,000,” “\$20,000 - \$29,999,” “\$100,000 or more”). As the income ranges varied across categories, responses were then recoded to the category midpoint and divided by 10,000. Response rate among mothers was higher than the response rate among fathers (see Table 2.2). Moreover, YDS youth were more likely to live with their biological mothers than with their biological fathers, and no attempt was made to survey non-residential fathers. Accordingly, I use mothers’ self-reported annual household income and utilize fathers’ responses only in cases where mothers were not surveyed or when mothers’ response is missing. The mean household income among YDS participants during the first year of the study was approximately \$34,000 (see Table 2.4).

Number of Siblings. Family size may affect the availability of time and resources for sport participation²⁰ and educational attainment. Moreover, family size may also affect young adult labor force participation. While Farré and Vella (2007) find that women from larger families, on average, hold more traditional views on whether women should work, Flouri and Buchanan (2002) find that family size is a significant predictor

²⁰ While the financial burden of larger families may limit parents’ ability to afford the costs of organized sports, other research suggests that older siblings’ sport participation often encourages participation among younger siblings (Côté 1999).

of men's, but not women's, labor force participation at age 33. Family size is reported by respondents' parents and is measured as the number of siblings for each YDS youth.

Responses range from 0 to 7, and YDS youth, on average, have one sibling.

High School Characteristics

Parental Relationships. My quantitative analyses control for adolescents' relationships with their parents during the high school years. While it is less clear in my study whether relationship quality is a precursor or product of adolescent sport participation, past research shows that parental support is associated with the amount of time youth spend in extracurricular activities (Anderson, Funk, Elliott, and Smith 2003) and is an important determinant of continued sport participation among girls between the ages of 11 and 16 (Butcher 1983). Respondents who are closer with their parent(s) may also model their own career after their parents' work (Blustein, Walbridge, Friedlander, and Palladino 1991).

An additive index measuring parental closeness was constructed (see Swartz, Kim, Uno, Mortimer, and O'Brien 2011) based on the following questions: (1) "*How close do you feel to him/her?*" (2) "*When you are faced with personal concerns and decisions, do you talk them over with him/her?*" (3) "*How often does (s)he talk over important decisions that (s)he has to make with you?*" (4) "*How often does (s)he listen to your side of an argument?*" Response options for each item ranged from 1 to 4, and each index had a range of 4 to 16. Parental closeness indices were averaged across the four high school years to create one index for each parent ($\alpha = .86$ for both scales). As shown

Table 2.5 Items from the Control Orientation Index

*	1.	<i>There is really no way I can solve some of the problems I have.</i>
*	2.	<i>Sometimes I feel that I'm being pushed around in life.</i>
*	3.	<i>I have little control over the things that happen to me.</i>
	4.	<i>I can do just about anything I really set my mind to do.</i>
	5.	<i>What happens to me in the future mostly depends on me.</i>
*	6.	<i>I mostly feel helpless in dealing with the problems of life.</i>
*	7.	<i>There is little I can do to change many of the important things in my life.</i>

* Denotes reverse-scored items.

in Table 2.4, YDS respondents, on average, report closer relationships with their mothers (11.5) than their fathers (9.6).

Control Orientation. I include a measure of control orientation, measured in ninth grade. This measure uses questions from Pearlin's Mastery Scale, which is designed to measure the extent to which respondents feel in control of forces that affect their lives (Pearlin, Menaghan, Lieberman, and Mullan 1981). Though many respondents likely participated in youth sports prior to the high school years, this variable captures a baseline measure of control orientation prior to high school sport participation. Respondents were asked to rate their agreement—on a scale from 1 (strongly disagree) to 4 (strongly agree)—with the statements listed in Table 2.5 (see also Finch, Shanahan, Mortimer, and Ryu 1991). External orientation items, indicated with an asterisk, were reverse-coded so that higher scores correspond to internal orientation. Items were then summed to create an additive control orientation scale.

Grade Point Average. I also include a baseline measure of students' grade point average during the ninth grade year to determine if academic orientation and ability influence sport participation and/or work outcomes. On the whole, past studies find that high school sport participation is associated with higher grade point averages (Hartmann

2008), and that academic performance is associated with labor market success (Baird 1985). As with family socioeconomic status, the inclusion of this measure is important for understanding whether the effects of high school sport participation on work outcomes is due to underlying differences between sport participants and non-participants. While sport participants may be more academically oriented due to social class or other existing differences, sport may also foster increased interest in school, demand the achievement of a specific grade point average in order to maintain athletic eligibility, lead to greater attention from teachers and coaches, widen networks and friendships with other school-oriented peers, and enhance educational aspirations for participants who wish to continue their participation at the collegiate level (Snyder and Spreitzer 1990 in Hartmann 2008).

Respondents were asked to circle *one* grade that best reflected their “grade point average so far this year.” Response options ranged from “A” (coded as 1) to “F” (coded as 12).²¹ This variable was then recoded so that higher grades (e.g., “A”) corresponded to a larger value on the grade point average scale. In order to minimize missing data, I imputed grade point averages from the 10th grade for a small number of respondents who did not report grade point averages in the baseline year (1988). The mean GPA was approximately 7.5, falling between an average grade of “C+” and “B-.”

²¹ A total of 13 respondents circled two or more grades that best reflected their current grade point average. In each of these cases, I referred to the original 1988 surveys to determine an appropriate grade point average (e.g., one respondent circled “B,” “C,” and “D”; therefore, their current GPA was recoded as “C”). While a few respondents reported a wide range in grades, I was able to compute grade point averages for all 13 respondents.

Young Adult Time-Varying Characteristics

The characteristics discussed above are useful for determining whether any observed relationship between sport participation and work is spurious, driven by underlying characteristics between participants and non-participants. In addition to these measures, I also consider the effects of additional work and family characteristics that vary from year to year during young adulthood. I include a control for survey year, as some work outcomes may be highly correlated with time. For example, wages—discussed in more detail in Chapter 5—generally increase over time as individuals accumulate education, work experience, and organizational tenure that often lead to career advancement.

Family Characteristics. I include parent status, relationship status, and partner work characteristics as time-varying covariates. Each of these characteristics impact the availability of time and resources, impacting the likelihood of participating in the labor force and structuring patterns of young adult work. Moreover, some groups may face discrimination in hiring or promotion due to gender, race, or other characteristics. Using an experimental research design, Correll, Benard, and Paik (2007), for example, find that mothers often face discrimination in hiring (see also Budig and England 2001). Correll and colleagues find that mothers were perceived as less competent than child-free women and received a lower recommended starting salary. Fathers, in contrast, often benefited from their parent status.

At each survey wave, I include a dummy variable for whether or not respondents have any children. The percentage of respondents with children increases steadily

throughout young adulthood, ranging from 24 percent of respondents at age 21-22 to 72 percent at age 33-34. I also construct three mutually exclusive categories for relationship status and partner work characteristics: (1) not married or cohabiting (43 percent of all person-year cases); (2) married or cohabiting with a partner who works full-time (42 percent)²²; and, (3) married or cohabiting with a partner who does not work full-time, including the unemployed, part-time workers, homemakers, full-time students, and those not working due to disability (14 percent of young adults). In multivariate analyses, married or cohabiting with a partner who works full-time is the reference category.

School Attendance. At each survey wave during young adulthood, respondents report whether they have attended school in the past year or in the time since the previous survey administration. I control for school attendance in my models—in addition to educational attainment (described below)—as being a student likely affects the number of weekly work hours and the types of occupations or industries within which individuals work. Respondents who report any school attendance, regardless of the institution type, are coded as “1.” As shown in Table 2.4, nearly one-third of YDS participants report school attendance in the past year during young adulthood. By comparison, 70 percent of respondents reported *any* school attendance from 1995 through 2007 (not shown, available by request).

Weekly Work Hours. In some analyses, I include a control for the regular number of hours worked per week at respondents’ “primary” job. When high and low estimates are provided (e.g., 30-40 hours per week), the mean number of weekly hours are

²² All percentages for time-varying young adult characteristics are reported for all person-years unless otherwise specified.

calculated. Across all waves included in my analytic sample, 1995 through 2007, nine cases were top-coded at 80 hours per week where extreme outliers were provided (e.g., 168 hours). Excluding those who were not employed, YDS participants, on average, worked 38 hours per week.²³

Educational Attainment. As discussed in the previous chapter, research suggests that sport participation is associated with increased educational attainment, including grades, advanced course taking, and college attendance and completion (e.g., Hartmann 2008). Given this established relationship, it is likely that any positive effects of sport participation on labor force outcomes may operate through educational attainment. In other words, sport participation increases educational commitment, which subsequently leads to greater labor force participation and more desirable employment.

To test this relationship, I examine whether the inclusion of educational attainment mediates the direct relationship between high school sport participation and young adult work outcomes. At each survey wave, respondents are asked, “*What is the highest level of education you have completed?*” Response options include elementary or junior high school; high school or GED; technical or vocational school; associate degree; some college; bachelor’s degree; master’s degree²⁴; Ph.D. or professional degree; and, other degrees, certificates, or diplomas. Respondents who circled “other degrees, certificates, or diplomas” were asked to specify the type of training or degree. These open-ended

²³ From 1995 through 2007, the mean number of weekly work hours remained relatively stable, ranging from 32 to 39 hours per week.

²⁴ “Master’s Degree” and “Ph.D. or professional degree” were not included as response options in 1995, when most respondents were 21 or 22 years old; however, respondents’ who had obtained an advanced degree were able to specify the degree type under “other degrees, certificates, or diplomas.”

responses (e.g., certified nursing assistant, real estate license) were then recoded to correspond to one of the predefined levels of education, most typically technical/vocational school or associate degree.

A close examination of the survey data revealed some inconsistency in reporting of educational attainment across waves. For example, a number of respondents enrolled in a four-year college or university after high school, before ultimately obtaining a two-year certificate (or vice versa). Others reported completing “some college,” but omitted this experience during later survey years, instead circling a high school degree or GED.²⁵ Still others oscillated between technical and associates degrees, likely due to uncertainty regarding which category best represented their educational experience. In order to minimize inconsistencies in the data, I combined the following three categories: technical/vocational school, associate’s degree, and some college. Lastly, respondents’ highest level of education was then recoded to correspond roughly to the number of *years* of education. Years of education ranged from 10 (elementary or junior high school) to 20 (Ph.D. or professional degree).

²⁵ In a small number of cases, reported educational attainment decreases over time. Ability to recall information—such as a certificate or degree received in an occupational field that one is no longer working—likely diminishes over time. Although it is possible that respondents were originally untruthful or mistaken about their actual educational attainment (perhaps anticipating a degree in the coming year or months that was ultimately not obtained), it is likely that earlier accounts are more accurate. To correct such inconsistencies, I recoded the data based on available information on school enrollment and institution type. For example, one respondent reported “some college” on several sequential surveys, “bachelor’s degree” during one wave of young adulthood, and then reverted to “some college” the following year. As they reported no school attendance during the inconsistent (“bachelor’s degree”) wave, this response was assumed to be accidental and recoded as “some college.”

Analytic Strategy and Logic of Analysis for Quantitative Data

Descriptive Analyses

I first compare characteristics of male and female sport participants and non-participants using two-sample t -tests (Snedecor and Cochran 1989). The goal of this analysis is to determine whether youth who participate in high school sports differ from non-participants at the baseline survey (prior to most high school sport participation) and in the most recent year of adulthood used in this analysis (2007). This comparison will identify potential sources of bias (e.g., parental socioeconomic status) that may lead to a spurious relationship between youth sport and young adult work outcomes.

Multivariate Regression Techniques

Moving beyond descriptive analyses, multivariate regression techniques are used to model the effects of independent variables on work outcomes. This method is preferable to two-sample t -tests because estimates of the effects of sport participation on labor force participation, for example, are adjusted to account for family or individual background characteristics that lead to both high school sport participation and labor force participation during young adulthood. Moreover, regression analyses can be used to *predict* the probability that male and female sport participants are working during a given survey year, adjusting for family socioeconomic status, high school grade point average, and other factors. Below, I describe each of the multivariate regression techniques used in subsequent chapters (see Allison 1999 for a more detailed discussion).

Logistic Regression. I use logistic regression to model the probability of high school sport participation, a dichotomous outcome. This analysis is useful for determining whether parental education or income, for example, is associated with an increase in the odds of high school sport participation. Where this technique is applied in the following chapter, I calculate the exponential function of each coefficient in order to estimate the odds ratio, or percentage increase or decrease in the probability of high school sport participation.

Ordinary Least Squares Regression. While logistic regression uses maximum likelihood to fit a regression line, ordinary least squares (OLS) regression minimizes the sum of squared residuals. I use OLS regression to model the effects of high school sport participation and other characteristics on logged biweekly earnings in 2007—when most respondents are 33 or 34 years old—as this approach is more appropriate for modeling a continuous outcome than logistic regression.

Multinomial Logistic Regression. I use multinomial logistic regression (see Long and Freese 2006) to model categorical dependent variables with more than two outcomes: job/occupational category in 2004 and neo-Marxian class category in 2005. This method is similar to estimating multiple logistic regressions for comparison with each category, but imposes additional constraints that result in more accurate estimates.

Mixed-Effects Models

Taking advantage of the longitudinal nature of the YDS, I use mixed-effects models (Rabe-Hesketh and Skrondal 2008; Steele 2008) to estimate work outcomes *throughout*

young adulthood. Mixed-effects modeling is appropriate for data with a hierarchical structure. In these analyses, repeated observations over time (level 1) are nested within individuals (level 2). As such, the multivariate regression techniques discussed above are inappropriate, as they assume independence across observations. Mixed-effects modeling also allows me to measure the effect of background and individual characteristics—such as race, family socioeconomic status, and high school sport participation—that are constant within respondents, as well as time-varying characteristics—such as work hours or relationship characteristics—that change across survey waves.

All mixed-effects models are generated using the software program Stata. Binary work outcomes—labor force participation and supervisory authority—are measured using multilevel mixed-effects logistic regression using the Stata command `xtmelogit`. Continuous work outcomes—industry sex ratio, logged biweekly earnings, and household income—are measured using multilevel mixed-effects regression using the Stata command `xtmixed`.

Except in models estimating logged annual household income, I begin my longitudinal analyses in 1995—four years after most respondents graduated from high school—to allow time for variation in educational attainment, a key mechanism in this analysis. Moreover, this delay allows many YDS respondents to transition from “survival jobs” to “career jobs” (Huiras, Uggen, and McMorris 2000) and establish their career trajectories. I end my analyses in 2007, prior to the onset of the most recent economic downturn that began in December 2007 (National Bureau of Economic Research 2010).

In-Depth Interviews

While the survey data allow me to identify relationships between sport participation and work outcomes, qualitative data is more suited for explicating these relationships. The YDS is limited in its ability to examine why and how sport participation influences young adults' careers. In order to understand women's experiences across gendered institutions, I invited a subsample of YDS respondents to participate in an in-depth interview on gender, sport participation, and work. I randomly selected 58 females who had reported some high school sport participation during their high school years. In order to facilitate in-person interviews, this sample was then further limited to respondents who lived within two and a half hours from the Twin Cities metropolitan area, a decision which excluded 12 of the randomly selected YDS respondents. In total, 46 female sport participants were invited to participate in the study.

In 2012, when YDS participants were in their late thirties, selected respondents were sent a letter inviting them to participate in a 60-90 minute interview. This invitation, displayed in the methodological appendix, described the nature of the study, provided examples of interview questions, informed respondents that they would be compensated \$50 for their time and participation²⁶, and provided my phone number and e-mail address. Respondents who were interested in being interviewed could use the provided contact information or return a pre-stamped postcard that was included with their invitation. Respondents who were not interested in the interview portion of the study could check

²⁶ As respondents were currently receiving \$50 for completing and returning their YDS questionnaire, this amount was considered to be appropriate compensation for their time. Funding for in-depth interviews was provided by a \$500 award from the Department of Sociology at the University of Minnesota.

the appropriate box on the postcard so that they would not be contacted again regarding this opportunity. Respondents who indicated their interest in the study by phone, email, or postcard were then contacted to schedule an interview.

Invitations were sent to the most recent mailing address on file, provided by most respondents in 2011. E-mail invitations were sent to three respondents whose mailings were returned as not deliverable. Of the 46 invitations to participate in the study, 31 (67 percent) provided no response. Three postcards were returned by respondents who did not wish to participate in the study, and the remaining 12 respondents expressed interest in the study by phone (2 respondents), e-mail (3 respondents), or by returning the pre-stamped postcard included with their invitation (7 respondents). Those wishing to participate were contacted up to three times to schedule an in-person interview. All interview procedures were approved by the University of Minnesota's Institutional Review Board (#1102E96061).

In total, 9 interviews were conducted with female YDS respondents. All interviews took place in a coffee shop in the Twin Cities metropolitan area or in the interviewee's home. Interviewees were given a consent information sheet, which was discussed in-person prior to the onset of the interview. Each interview revolved around the following themes (the full interview guide, recruitment material, consent information sheet, and short bios for all interviewees can be found in the methodological appendix):

1. *High School Sport Participation*: types of sports participated in, positive and negative sport experiences, relationships with coaches and teammates, what respondents took away from sport experience
2. *Adult Sport Participation*: types of sports/physical activity since high school, significance of sport for interviewee and interviewees' family

3. *Current Job*: job title and daily assignments, what led to current work, long-term career plans, organizational size, sex ratio of co-workers and supervisors, relationships with colleagues, supervisory authority (if applicable), role or significance of sport at work
4. *Past Work History*: past work experiences, career trajectory, early aspirations, educational attainment and experiences

The average interview length was 1 hour and 13 minutes, but varied from 25 minutes to 1 hour and 56 minutes. All interviews were tape-recorded with the interviewees' permission and then fully transcribed and coded for like themes. All identifiable information was removed from the transcribed interview and pseudonyms are used to protect interviewees' identity.

Summary

This chapter details the multiple sources of data and methods used to analyze the relationship between gender, high school sport participation, and young adult work outcomes. The goal of the quantitative analysis is to establish whether relationships exist among these core measures. The methods employed in this study advance past literature by further interrogating whether any observed differences between sport participants and non-participants are due to pre-existing differences in individual and family background characteristics. The qualitative analysis complements this quantitative analysis by exploring potential mechanisms through which gender and high school sport participation influence young adult work experiences.

CHAPTER 3: SELECTION INTO SPORT

Much of the past literature exploring the supposed effects of youth sport can be criticized for its lack of methodological rigor. Specifically, most studies are cross-sectional, measuring outcomes at a single point in time. Moreover, many scholars fail to consider whether selection into sport, rather than the experience of sport itself, which leads to better outcomes (Videon 2002). For example, the positive relationship observed between high school sport and young adult earnings (see Figure 5.1) could be due greater sport participation among more motivated youth or those with greater family resources or networks for pursuing education, work, or unpaid internships. Before examining the longitudinal relationship between high school sport participation and young adult work, it is crucial to examine how high school sport participants differ from non-participants during the ninth grade. This analysis will help guide my analyses of work outcomes, and help determine whether sport has positive effects on young adult work or whether these patterns can be explained by pre-existing differences during the baseline year of the study.

Characteristics of High School Sport Participants

Pre-Existing Differences between Participants and Non-Participants

Selection into sport participation is not random, but instead is associated with a number of pre-existing differences among youth. For example, previous research commonly points to family social class as a strong predictor of youth sport participation (Hasbrook 1996; Wilson 2002). Eccles and Barber (1999) find that team sport

participation is positively correlated with mothers' education, and that males participated in a higher number of sport teams than their female counterparts. Giuliano, Popp, and Knight (2000) target early childhood socialization as a way for increasing girls' sport participation, finding that women who played with more masculine toys/games or played with boys or in mixed-gender groups were more likely to participate in collegiate sports (see Chapter 2 for a more comprehensive review of gender and sport).

The relationship between sport and social class may be linked to the financial costs associated with participation, as well as time and other resources required for continued participation throughout childhood and youth. In her ethnography of children and their families, Annette Lareau demonstrates how childrearing strategies differ by social class. Working class and poor families prefer the "accomplishment of natural growth," characterized by long stretches of leisure time and autonomous play, while upper middle class families utilize a "concerted cultivation" approach, whereby children's lives are highly structured and filled with formally organized activities that often lead to important institutional advantages (Lareau 2003).

A descriptive comparison of male and female high school sport participants and non-participants in the YDS data is shown in Table 3.1. These bivariate analyses reveal a number of pre-existing differences between high school sport participants and their peers. As expected, both indicators of social class—parental education and family income—are significantly higher among sport participants. Sport participation is somewhat linked to family size among males, but the number of siblings is not a significant predictor of sport participation among females. Unfortunately, I am unable to determine siblings' sex from

Table 3.1 Demographic and High School Characteristics

	Females		Males	
	Participants	Non-Participants	Participants	Non-Participants
White	.812	.787	.795	.793
Parental Education	14.783***	13.716	14.309**	13.472
Family Income	4.021*	3.494	3.654 [#]	3.228
Number of Siblings	1.381	1.208	1.167 [#]	.949
Closeness to Mother	11.681	11.656	11.308	11.374
Closeness to Father	9.711***	8.805	10.092 [#]	9.551
Control Orientation	20.141	19.670	20.695*	19.886
Grade Point Average	8.731***	6.887	8.203***	6.687

Note: T-tests for differences between participants and non-participants, separately for males and females.

*** $p < .001$, ** $p < .01$, * $p < .05$, [#] $p < .10$ (two-tailed tests).

these data, which may affect the dynamics of sibling relationships. Table 3.1 does, however, consider respondents' relationship with their parents during the ninth grade year. While the quality of the mother-child relationship is not associated with sport participation among either sex, sport participants, on average, report closer relationships with their fathers. This relationship is especially strong among female respondents ($p < .001$). Though this measure is reported during the baseline year, it is possible that girls' participation in youth sport, prior to their freshman year of high school, influences adolescents' relationships with their fathers. In other words, youth sport may act as a bonding experience between fathers and daughters.

Sport participants and non-participants also differ along two additional high school characteristics: control orientation and grade point average. During the baseline year, male high school sport participants report feeling more in control of their lives and

futures than males who do not participate in high school sports. Though female participants also report higher levels of control orientation than females who do not participate in high school sports, this difference is not statistically significant. Lastly, sport participants report higher grade point averages during the ninth grade year. This difference is particularly important, as intelligence and academic ability are highly correlated with educational attainment (Deary, Strand, Smith, and Fernandes 2007), which in turn affects young adult work outcomes (Day and Newburger 2002).

The above analysis points to a number of correlates of sport participation. While it is useful to look at each of these relationships in isolation (shown in Table 3.1), a multivariate approach is necessary to model the determinants of high school sport participation, net of control variables and other covariates. In the following section, I simultaneously consider the effects of demographic and high school characteristics on sport participation using logistic regression techniques.

Logistic Regression Estimates of High School Sport Participation

Table 3.1 suggests that sport participation is correlated with family socioeconomic status, paternal closeness, control orientation, and academic performance. Table 3.2 presents the results of logistic regression analyses that examine whether these relationships remain statistically significant net of other covariates. The first column predicts any high school sport participation, regardless of the sport type, level of participation, or respondent's sex. Results for males and females are comparable unless otherwise noted.

Table 3.2 Logistic Regression Predicting High School Sport Participation

	<i>Any Sport Participation</i>	<i>“Formal” Sport Participation</i>
<i>Demographic Characteristics</i>		
White	-.155 (.228)	-.096 (.224)
Female	-.415* (.177)	-.197 (.172)
Parental Education	.087* (.042)	.069# (.041)
Family Income	.011 (.047)	.001 (.045)
Number of Siblings	.110 (.076)	.101 (.073)
<i>High School Characteristics</i>		
Closeness to Mother	-.040 (.035)	-.047 (.035)
Closeness to Father	.074* (.034)	.063# (.034)
Control Orientation (wave 1)	.026 (.030)	.038 (.029)
Grade Point Average	.323*** (.043)	.290*** (.043)
Constant	-3.997*** (.875)	-4.115*** (.855)
Log Likelihood	-400.289***	-413.222***
Observations	665	665

Standard errors in parentheses

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$

Net of other covariates, respondents' sex and parental education are the only demographic characteristics that predict any sport participation during the high school years. As shown, the effect of respondents' sex on high school sport participation is relatively large in magnitude: the odds of participating in sports are 34 percent lower for females than for males ($e^{-.415} = .660$). This analysis also suggests that high school sport participants' parents are more educated, on average, than non-participants' parents. Each

additional year of education among parents is associated with a 9 percent increase in the odds of high school sport participation ($e^{.087} = 1.091$).

Among the high school characteristics included in the model, paternal closeness and freshman grade point average were also predictive of high school sport participation. One-third of a letter grade increase in GPA—earning mostly B- grades as opposed to mostly C+ grades, for example—is associated with a 38 percent increase in the odds of participating in high school sports ($e^{.323} = 1.382$).

Results for “formal” sport participation are also shown in Table 3.2. Consistent with the operationalization of sport participation that is often used in existing literature (e.g., Howell, Miracle, and Rees 1984; Troutman and Dufur 2007), this outcome distinguishes between respondents who participated in school-sponsored varsity or junior varsity sports (coded as “1”) and students who either participated informally (e.g., school-sponsored intramural or club teams, community-based teams or leagues) or did not participate at all (coded as “0”). The most notable difference is that school-sponsored varsity or junior varsity sport participation is not associated with respondents’ sex. While a greater percentage of males formally participated in high school sports—49 percent of males and 45 percent of females—sex does not affect the odds of formal sport participation, net of other individual and family characteristics. This suggests that sex differences are more pronounced when informal participation is also measured during the high school years. The effects of grade point average, parental education, and paternal closeness decrease in magnitude as compared to the model estimating any high school

sport participation, though each coefficient remains statistically significant ($p < 0.1$ for parental education and closeness to father).²⁷

This analysis identifies sex, grade point average, parental education, and paternal relationships as key predictors of high school sport participation. Accordingly, it is important to control for these effects when predicting young adult work outcomes to determine whether any observed relationship between sport and work is due to these underlying differences between participants and non-participants. I next turn to the relationship between high school sport participation and young adult family, education, and work characteristics that may influence career outcomes.

Young Adult Characteristics of Sport Participants and Non-Participants

Table 3.3 compares characteristics of high school sport participants and non-participants during 2007, the final year of my longitudinal analyses of young adulthood. Sixteen years after high school graduation, sport participants' family structures vary significantly from their peers. Among both sexes, those who participated in high school sports are less likely to be single. Only 19 percent of male participants and 22 percent of female participants as compared with 35 percent of male non-participants and 39 percent of female non-participants are not married or cohabiting.

²⁷ In supplemental analyses, I consider whether the effects of independent variables differ for males and females. I find that the relationship between grade point average and both measures of high school sport participation, net of other characteristics, is somewhat stronger for females than for males ($p < .10$). Parental education is also more predictive of formal sport participation among females than males ($p = .07$). All other sex interactions are not statistically significant (not shown, available by request).

Table 3.3 Young Adult Characteristics (2007) by Sex and Sport Participation

	Females		Males	
	Participants	Non-Participants	Participants	Non-Participants
Partner (full-time work)	.683**	.536	.469	.465
Partner (not full-time)	.098	.071	.345**	.182
Single	.219***	.393	.186**	.354
Children	.727	.778	.724*	.588
School Attendance	.235	.267	.260*	.137
Work Hours	36.877	36.675	43.850***	39.586
Educational Attainment	15.251***	13.976	15.155***	13.604

Note: T-tests for differences between participants and non-participants, separately for males and females.

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$ (two-tailed tests).

This difference may be attributed to the greater self-esteem and overall mental health of sport participants, allowing them to find comparable mates and successfully navigate romantic relationships. Moreover, some of the values instilled in sport culture, such as teamwork and self-sacrifice, may similarly help participants communicate and negotiate with a romantic partner. Adolescents who participate in sports have fewer friends who skip school or use drugs (Eccles and Barber 1999), and are more likely to associate with the college-bound “leading crowd” during high school (Coleman 1961). Sport participants’ conformity to more normative or prosocial behaviors and roles may carry into young adulthood as well, partially explaining their greater likelihood of college attendance, marriage/cohabitation, and labor force participation.

It may also be possible that young adults model the behavior of their own parent(s). In supplemental analyses (available by request), I test whether high school sport participants are more likely to live with both biological/adoptive parents during

high school. The percentage of youth living with both parents is similar for boys (60 percent of high school sport participants live with both parents as compared with 58 percent of non-participants). Among girls, however, sport participants are much more likely to grow up in an intact, two-parent family: 50 percent of non-participants versus 65 percent of sport participants ($p < .01$).

Other differences also emerge when comparing the work status of respondents' partner among those who are married or cohabiting: female sport participants are more likely than non-participants to have a partner who works full-time whereas male sport participants are more likely than their non-participant counterparts to have a partner who does not work full-time (e.g., working part-time or full-time homemaker). The latter could be explained by sport participants' greater socioeconomic status, as their partners may be more financially able to exit the labor force or work part-time jobs. Male sport participants are also more likely to have children in 2007 (72 percent of participants versus 59 percent of non-participants); therefore, partners may work fewer hours (either temporarily or permanently) in order to care for children. This difference does not exist among female sport participants, suggesting that this process is highly gendered. Females, regardless of high school sport participation, were much less likely than males (10 percent versus 28 percent, $p < .001$) to report having a partner who works less than full-time in 2007.²⁸

²⁸ The overwhelming majority of YDS respondents, 96 percent, identified as heterosexual. Though this discussion ignores the experiences of lesbian or gay parents, only one non-heterosexual respondent reported having a partner who did not work full-time.

Sport participation is also associated with young adult work and school characteristics. Among males and excluding zero-earners, sport participants, on average, work 4 more hours per week. Though sport participation was not associated with weekly work hours among females, those who participated in sports reported greater educational attainment than non-participants (15.25 years as compared to 13.98 years, respectively). The strong relationship between high school sport participation and educational attainment also existed for males. Moreover, over one-fourth of male high school sport participants were currently attending school in 2007 as compared to only 14 percent of non-participants. The greater educational attainment and school attendance among male participants suggests that many sport participants were pursuing advanced degrees in their early to mid-thirties. Supplemental analyses suggest that 49 percent of male sport participants had earned a Bachelor's degree or higher by 2007 as compared to only 16 percent of males who did not participate in high school sports (not shown, available by request).

This analysis does not speak to whether such differences are the direct result of participation in high school sports or are simply correlated with sport, perhaps due to pre-existing differences in family socioeconomic status or grade point average. Still, this comparison is a useful starting point for understanding the role of high school sport during the transition to adulthood. In the following chapter, I test whether sport participation is associated with young adult labor force participation, occupations, and industry sex ratio.

Summary

In this chapter, I find evidence of selection into sport. Logistic regression analyses suggest that sex, parental education, closeness to father, and grade point average are predictive of high school sport participation. While females were much less likely to participate in any sports during the high school years, their odds of participation in varsity or junior varsity sports were comparable, net of demographic and high school characteristics. Though their leisure time outside of school is less likely to involve sports, this analysis suggests that girls are taking advantage of the equal opportunities to participate in school-sponsored sports that are required by Title IX. In the later years of young adulthood (age 33-34), high school sport participants were less likely to be single and reported greater educational attainment. Among sex-specific relationships, female participants were more likely to have a partner who worked full-time while male sport participants were more likely to have a partner who did not work full-time. Males were also somewhat more likely to have children and were more likely to be attending school in 2007.

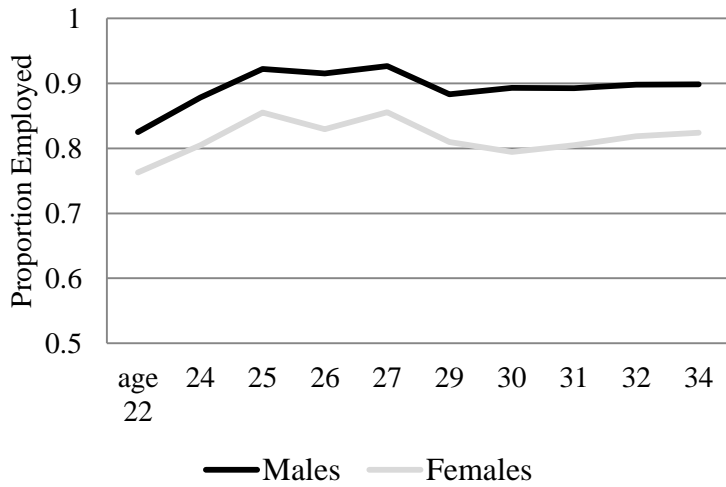
CHAPTER 4: LINKING PARTICIPATION IN GENDERED INSTITUTIONS

The previous chapter demonstrates that some youth are more likely to participate in sport than others. Specifically, males, youth with more educated parents, those who report greater closeness to their father, and youth with higher ninth grade GPAs are more likely to participate in sports during the high school years. Controlling for these background characteristics, as well as time-varying young adult characteristics, is crucial in order to determine whether any observed relationships between high school sport participation and young adult work can be explained by pre-existing differences during the baseline year of the study. In the next section, I examine whether participation in sport is associated with later labor force participation. Next, I test whether sport is associated with the *type* of young adult work, specifically occupational categories and industry sex composition. The latter analysis sheds light on whether the gendered nature of sport better prepares youth for, or socializes youth to embrace, more masculine jobs.

Young Adult Labor Force Participation

The steady rise in women's labor force participation since the late 1900s has been described by scholars as the "most remarkable economic statistic for the United States over the twentieth century" (Jacobsen 1999: 597). Economists attribute this growth to a number of factors, including an increasing demand for labor, particularly within "feminized" fields (e.g., service industry), technological advances in household appliances that decreased the demand for household labor, reproductive technology that allowed families to have greater control over the timing of childbirth and the size of

Figure 4.1 Proportion Employed during Young Adulthood (1995-2007)



families, increasing educational attainment among women, increasing tolerance of women working outside the home and a rise in egalitarian attitudes more generally, diminished wages among men, increasing costs of living, and demographic shifts in the working age population (Bremmer and Kesselring 2004; Hotchkiss 2006; Jacobsen 1999).

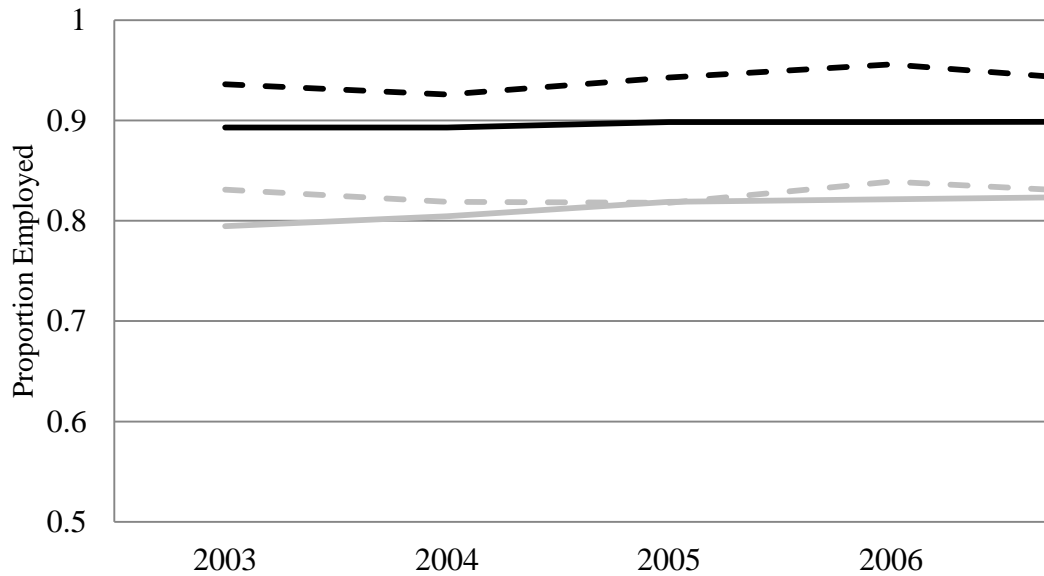
Despite tremendous gains, a large sex gap in U.S. labor force participation continues to persist (e.g., Hotchkiss 2006; Mosisa and Hipple 2006). In 2010, the U.S. labor force participation rate of men was 71.2 percent as compared to 58.6 percent of women (Toossi 2012). As illustrated in Figure 4.1, this persistent sex gap is evident in the YDS sample as well. The difference between males' and females' employment status is

statistically significant at each survey wave. Across all person-years of young adulthood, YDS males had a labor force participation rate of 89 percent while females' labor force participation rate was 82 percent ($p < .001$).

The higher labor force participation rate observed in the YDS sample may be driven by the age of the cohort during this analysis (21 to 34 years old). My analysis begins after the typical college years and ends before the peak of most adults' careers. At the same time, young adulthood also represents normative childbearing years, and young parents, especially mothers, may take extended breaks from the labor force in order to care for young children. An alternative explanation is that Minnesota has one of the highest labor force participation rates in the country (McMurry 2002). Figure 4.2 compares the labor force participation of males and females in the YDS to Minnesotans in the Bureau of Labor Statistics' Current Population Survey (CPS), a monthly survey of U.S. households. I limit this comparison to 2003 through 2007 in order to more closely approximate the age category (age 25 to 34) presented in summary statistics by the Bureau of Labor Statistics (U.S. Department of Labor 2013). The proportion of males employed in the YDS sample, indicated by the solid black line, is somewhat lower than the state average, illustrated by the black dashed line. As shown by the grey lines, female labor force participation in the YDS is comparable to similarly-aged Minnesotans in the CPS.

Though empirical research is scarce, several studies have tested whether sport participants are more likely to be employed than non-participants. Using a cross-sectional sample from 25 European countries, Kavetsos (2011) finds that physically active

Figure 4.2 Labor Force Participation Rates across YDS and CPS Samples



respondents are more likely to be employed, especially among males. Exploring *past* sport participation, Barron, Ewing, and Waddell (2000) find no differences in males' labor force participation. The authors limit their sample to men due to limited opportunities for girls to participate in sports during respondents' high school years (early 1970s to early 1980s). Lastly, Sabo and colleagues (1993) report a more complicated pattern of labor force participation in their analysis of the High School and Beyond Study. Excluding respondents who were currently attending college, high school sport participation during the early 1980s was positively associated with labor force participation four years after high school among urban white males only. Urban black females who had participated in sports were *less* likely to be employed than their non-participant peers.

Figure 4.3 Proportion Employed by Sport Participation and Sex (1995-2007)

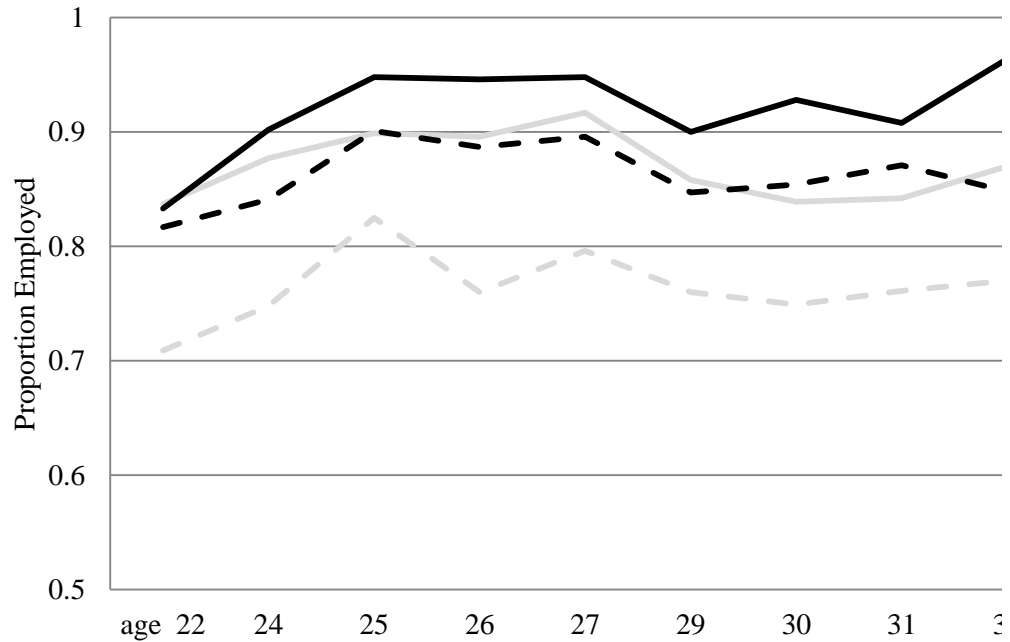


Figure 4.3 examines the relationship between high school sport participation and young adult labor force participation in the YDS. This analysis picks up where Sabo and colleagues (1993) end their study: four years after most respondents have graduated from high school. This delay allows me to include college graduates—as well as those currently attending school—in my analysis, offering a more complete picture of the young adult labor force. Among both sexes, sport participants are more likely to be employed during each survey year. As shown, male sport participants consistently report the highest labor force participation rate, followed by female sport participants and male non-participants. Female non-participants, indicated by the gray dashed line, report the lowest labor force participation rates. Given the precursors of high school sport participation identified in the previous chapter, I next consider the role of other covariates to further probe this relationship.

Longitudinal Analysis of Labor Force Participation

Table 4.1 presents the results of multilevel mixed-effects logistic regression models predicting young adult labor force participation (1995-2007). Note that respondents must be currently employed at the time of survey administration in order to be counted as a labor force participant, though they may have worked at other points during the calendar year. As discussed more fully in Chapter 2, multiple data points over time are clustered at the individual level. In Model 1, the effect of high school sport participation is shown, net of survey wave. Holding the random effect constant, high school sport participants are 152 percent ($e^{.926}=2.524$) more likely to work than non-participants. In this model, survey wave does not predict labor force participation. Indeed, Figure 4.3 did not suggest consistent growth or decline in labor force participation during young adulthood, though there is some variation from year to year.

In addition to sport participation and survey wave, Model 2 of Table 4.1 includes demographic and high school characteristics. Recall from the analysis shown in the previous chapter (see Table 3.2) that parental education and academic achievement, in particular, were strong predictors of high school sport participation. If the effect of sport participation is mediated with the addition of these variables, this would suggest that any differences in labor force participation between high school sport participants and non-participants are due to pre-existing differences. Although the effect of sport participation is reduced somewhat with the inclusion of these additional covariates, sport remains strongly associated with labor force participation. Here, sport participants are nearly

Table 4.1 Multilevel Mixed-Effects Logistic Regression Predicting Labor Force Participation

	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
Sport Participation	.926*** (.193)	.674*** (.206)	.651** (.208)	.526* (.210)
<i>Demographic Characteristics</i>				
White		.650** (.244)	.497* (.246)	.541* (.247)
Female		-.672*** (.196)	-.492* (.200)	-.547** (.202)
Parental Education		-.048 (.045)	-.069 (.046)	-.127** (.047)
Family Income		.076 (.051)	.047 (.051)	.026 (.052)
Number of Siblings		.000 (.080)	.032 (.081)	.024 (.082)
<i>High School Characteristics</i>				
Closeness to Mother		-.009 (.039)	-.014 (.039)	-.012 (.039)
Closeness to Father		.009 (.037)	.012 (.037)	.010 (.038)
Control Orientation		.009 (.033)	.013 (.033)	.008 (.033)
Grade Point Average		.106* (.044)	.076 [#] (.045)	.005 (.047)
<i>Young Adult Characteristics</i>				
Partner (not work full-time)			-.016 (.176)	-.009 (.178)
Single			-.331* (.142)	-.265 [#] (.143)
Children			-1.301*** (.163)	-1.234*** (.165)
Attending School			-.294* (.123)	-.337** (.125)
Years Education				.303*** (.050)
Survey Wave	.014 (.016)	.015 (.016)	.058** (.019)	.018 (.020)
Intercept	2.114*** (.248)	1.512 (.945)	2.458* (.966)	.295 (1.035)
<i>Random-effects Parameter</i>				
Individual Respondent	3.658*** (.412)	3.361*** (.386)	3.371*** (.392)	3.404*** (.399)

Observations	5785	5785	5785	5785
Log Likelihood	-1917.1***	-1902.6***	-1866.9***	-1847.8***
Standard errors in parentheses				
*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$				

twice as likely ($e^{.674}=1.962$) to work during young adulthood than respondents who did not participate in high school sports.

Respondents' race, sex, and grade point average are also associated with labor force participation in Model 2. Interestingly, the effect size for sport participation, sex, and race are similar in magnitude, such that any increase in the odds of labor force participation for sport participants is largely negated for females and racial minorities. White respondents, as compared to racial minorities, are 92 percent ($e^{.650}=1.916$) more likely to work, and females have a 49 percent ($e^{-.672}=.511$) reduction in the odds of labor force participation as compared to males. In addition, a one unit increase in grade point average is associated with a .106 unit increase in the expected log odds of labor force participation. Family of origin—including socioeconomic status, family size, and parental relationships—was not associated with young adult labor force participation.

Moving beyond the high school years, Model 3 includes family composition and school attendance, characteristics which are measured each survey year during young adulthood. *Partner (not work ful,-time)* refers to respondents who are married or cohabiting with a partner who works part-time or not at all. *Single* refers to respondents who are not married or cohabiting. Respondents who are married or cohabiting with a partner who works a full-time job are the referent group. Being single, as compared to having a partner who works full-time, is associated with a decrease in the odds of labor

force participation ($\beta = -.331$). Though being single may increase the financial need for individuals to work, this finding may be partially driven by respondent health, which may influence both individuals' ability to work as well as their attractiveness as a potential mate. Supplemental analyses (available by request) reveal that respondents who had ever been diagnosed with a major disease, disability, or handicap (9 percent of respondents) were less likely to work in 2005 (57 percent versus 88 percent, $p < .001$) and were more likely to be single (46 percent versus 29 percent, $p < .01$).

Having children is associated with a 73 percent reduction in the odds of working ($e^{-1.301} = .272$). This large effect may be somewhat driven by the timing of this study. In this analysis, spanning 1995 to 2007, many respondents were beginning to form families, and many respondents who were typically employed during young adulthood took leave to care for young children. In fact, less than one-fourth of respondents were parents in 1995 (age 21-22) while 72 percent had children by 2007 (age 33-34).

Not surprisingly, those who attended school in the past 12 months were less likely to report current employment, as they were likely focusing on school work or obtaining additional education in order to increase their employment prospects or pursue an entirely new career path. Net of these time-varying characteristics, the effect of survey wave also emerges as significant. In other words, the odds of labor force participation increases over time during young adulthood.

Lastly, Model 4 of Table 4.1 includes educational attainment as a potential mediator of sport participation. Given the relationship between sport and educational attainment established in existing literature, education may be the missing link between

sport and work.²⁹ If sport fosters increased educational attainment, and education leads to greater commitment to, and opportunities for, paid work, then perhaps education will mediate the remaining relationship between sport and labor force participation. As shown, the addition of educational attainment reduces the effect of sport participation in both size and magnitude, but the relationship between sport and work remains intact. This change, as well as the strong direct effect of years of education on labor force participation ($\beta = .303$), suggests that education is only one mechanism through which sport influences work outcomes. Taken together, demographic, high school, and young adult characteristics explain less than half of the relationship between high school sport and labor force participation.

The addition of educational attainment in Model 4 also results in two additional changes as compared to Model 3. First, parental education, net of respondents' education and other characteristics, is negatively associated with young adult labor force participation. Specifically, a one unit increase in parental education is associated with a .127 unit decrease in the expected log odds of labor force participation. Second, work status is no longer associated with survey wave, suggesting that time in Model 3 may be acting as a proxy for increasing educational attainment among survey respondents.

In supplemental analyses, I test whether the effect of sport participation on labor force participation varies for males and females. Though the interaction between sport and sex is not statistically significant (not shown, available by request), there may be sex differences in the effects of other independent variables. For example, cultural

²⁹ The relationship between high school sport participation and educational attainment is modeled explicitly in the following chapter (see Table 5.2).

expectations regarding the significance of work vary for men and women, so that men are traditionally expected to be the breadwinner and provide financially for their families while women are viewed as better suited for caregiving roles (Cabrera, Tamis-LeMonda, Bradley, Hofferth, and Lamb 2000). As a result, the effects of children or partner work status on work outcomes may differ substantially for males and females in my sample. In Table 4.2, I replicate Models 3 and 4 of Table 4.1 separately for males and females.

With the exception of sport participation and educational attainment, all other effects are sex specific. In Model 1, race and grade point average independently predict labor force participation for males only. The odds of young adult labor force participation are 182 percent greater ($e^{1.039}=2.826$) for white males than for non-white males. Similarly, a one-third of a letter grade increase in grade point average—equivalent to moving from a B+ to an A-, for example—is associated with a .157 unit increase in the expected log odds of labor force participation. While the effect of race for males holds constant with the addition of educational attainment in Model 2, ninth grade GPA is mediated by respondents' own educational attainment.

The negative association between parental education and young adult labor force participation observed in the previous analysis (see Model 2 of Table 3.4) is revealed to be specific to females. As shown in Model 2 of Table 4.2, an additional year of parental education is associated with a .144 unit decrease in the expected log odds of females' labor force participation, net of respondents' own education.³⁰

³⁰ In supplemental analyses, I examine girls' intentions of working after having children, reported in the ninth grade. The vast majority of girls expected to return to work after childbirth (94 percent), making it difficult to detect statistically significant differences in

Important differences also emerge among young adult characteristics. The effects of these characteristics change little with the inclusion of educational attainment; therefore, I focus my discussion of these variables on Model 2 of Table 4.2. As expected, the strong negative effect of children on labor force participation is limited to mothers. In fact, fathers are somewhat *more* likely to work as compared to males without children, though this relationship falls short of standard significance levels ($\beta=.425$, $p=.102$). Males who are single or whose partner does not work full-time (married or cohabiting with a partner who works full-time is the reference group) have lower odds of labor force participation. However, these variables are not associated with females' labor force participation. This may reflect dominant gender roles which emphasize men's responsibility to provide financially for one's family. While it is normative or perhaps expected for women to reduce their work hours or stop working entirely to care for young children, such choices are less common or supported for men. School attendance is predictive of employment status for both males and females, and the odds of labor force participation increase for females as they age through young adulthood ($\beta=.052$).

The random-effects parameter for males and females can be interpreted as the amount of variation in labor force participation across individual respondents. The standard deviation of 1.6 for males, as compared to the standard deviation of 4.3 for

these expectations. Among girls whose parents earned a bachelor's degree or higher, 91 percent expected to work after having children as compared to 94 percent of those whose parent(s) did not hold a four-year college degree ($p=.262$). Girls who had a stay-at-home mother were more likely to expect to stay home after having their own children ($p=.049$), but mothers' work status did not predict differences in females' educational attainment at age 33-34 (not shown, available by request).

Table 4.2 Multilevel Mixed-Effects Logit Predicting Work Status (separately by sex)

	<i>Model 1</i>		<i>Model 2</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
Sport Participation	.567* (.254)	.618* (.301)	.473 [#] (.258)	.496 (.303)
<i>Demographic Characteristics</i>				
White	1.039*** (.303)	.051 (.354)	1.033*** (.306)	.130 (.355)
Parental Education	-.021 (.058)	-.099 (.065)	-.084 (.061)	-.144* (.066)
Family Income	-.006 (.066)	.096 (.072)	-.021 (.067)	.076 (.072)
Number of Siblings	-.043 (.116)	.093 (.109)	-.050 (.117)	.085 (.109)
<i>High School Characteristics</i>				
Closeness to Mother	-.022 (.054)	-.028 (.054)	-.020 (.055)	-.025 (.054)
Closeness to Father	-.005 (.051)	.017 (.051)	-.007 (.052)	.015 (.051)
Control Orientation	.050 (.041)	-.012 (.049)	.040 (.041)	-.014 (.049)
Grade Point Average	.157** (.054)	.011 (.066)	.077 (.057)	-.045 (.068)
<i>Young Adult Characteristics</i>				
Partner (not work full-time)	-.587* (.275)	-.141 (.242)	-.654* (.278)	-.091 (.244)
Single	-.644** (.237)	-.241 (.181)	-.564* (.240)	-.196 (.182)
Children	.303 (.254)	-2.276*** (.228)	.425 (.260)	-2.210*** (.231)
Attending School	-.520** (.202)	-.243 (.157)	-.647** (.209)	-.262 [#] (.158)
Years Education			.330*** (.073)	.256*** (.068)
Survey Wave	.010 (.031)	.088*** (.024)	-.032 (.032)	.052* (.026)
Intercept	.528 (1.308)	3.958** (1.361)	-1.741 (1.425)	1.916 (1.463)
<i>Random-effects Parameter</i>				
Individual Respondent	1.559*** (.349)	4.289*** (.619)	1.600*** (.363)	4.303*** (.624)
Observations	2378	3407	2378	3407
Log Likelihood	-666.4***	-1155.4***	-655.4***	-1148.1***

Standard errors in parentheses; *** $p < .001$, ** $p < .01$, * $p < .05$, [#] $p < .10$

females, indicates that the variance in labor force participation is much greater among females in young adulthood.

Taken together, these findings highlight the importance of sex in understanding how individual background and time-varying characteristics impact young adult work. Similarly, the effects of high school sport participation may not be universal for all respondents, but instead vary depending on sport type or the level of participation. In the following section, I again model labor force participation using multilevel mixed-effects logistic regression techniques, but examine how sport context influences young adult patterns of employment.

Labor Force Participation by Sport Context

Table 4.3 examines whether the effects of sport participation on young adult labor force participation vary depending on “sport context,” meaning: (1) the level of participation, distinguishing between school-sponsored varsity or junior varsity—which I refer to as “formal” participation—and school-based intramural or club teams, community organized teams or leagues, and informal recreation or personal fitness—which I refer to as “informal” participation; (2) participation in team sports and individual sports; and, (3) participation in contact and non-contact sports.

As shown in Model 1 of Table 4.3, “formal” sport participation, but not “informal” participation, is associated with young adult labor force participation. Net of all other covariates, including educational attainment, the odds of working during young

Table 4.3 Multilevel Mixed-Effects Logit of Work Status by Sport Context

	<i>Formal/Informal</i>	<i>Team/Individual</i>	<i>Contact/Non-contact</i>
<i>Sport Participation</i>			
Varsity/Junior Varsity	.603** (.210)		
Informal Participation	-.061 (.259)		
Team Sport(s)		.467* (.212)	
Individual Sport(s)		-.108 (.223)	
Contact Sport(s)			-.032 (.239)
Non-contact Sport(s)			.448* (.220)
<i>Random-effects Parameter</i>			
Individual Respondent	3.358*** (.395)	3.409*** (.399)	3.415*** (.400)
Observations	5765	5785	5785
Log Likelihood	-1845.056***	-1848.520***	-1848.764***

Standard errors in parentheses

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$

Additional independent variables not shown (see Table 4.2 for approximate effects): white, parental education, family income, number of siblings, closeness to mother, closeness to father, control orientation, grade point average, partner (not work full-time), single, children, attending school, years of education, and survey wave.

adulthood are 83 percent greater for youth who participate in varsity or junior varsity sports, as compared to those who do not participate in *any* sports during the high school years ($e^{.603}=1.828$). Labor force participation is also associated with team—but not individual—sport participation (shown in Model 2) as well as non-contact—but not contact—sport participation (shown in Model 3). The effects of other independent variables are comparable to results presented in Table 4.2 (not shown, available by

request). Supplemental analyses show a significant interaction between sex and team sport participation ($\beta=-1.130, p<.05$).³¹

The strong effects of formal sport participation, team sports, and non-contact sports on labor force participation indicate that sport participation does not have universal effects. What is it about these sport contexts that lead to greater labor force participation? In contrast to “informal” sport participation, school-sponsored varsity sports are more visible to peers and the wider community. Moreover, many schools require students to try out for a limited number of positions, often leading to a more competitive and advanced level of play. Team sports, in comparison to individual sports, require participants to work together as part of a team in order to accomplish a similar goal. This socialization may better prepare participants for their future roles as workers. The YDS data are limited in their ability to test these potential mechanisms, but I will discuss these themes in greater detail in reference to my qualitative data (see Chapter 6). In the following section, I test whether sport participation, and these sport contexts in particular, similarly affect young adults’ occupations.

Occupational Segregation by Sport Participation

In the previous analyses, I find that high school sport participation is strongly associated with young adult labor force participation. In this section, I examine whether

³¹ Three YDS respondents indicated that they participated in a specific sport (e.g., basketball) but did not indicate whether they participated at the formal or informal level, resulting in a change in sample size across models in Table 4.3. Results are substantively similar when these three respondents are excluded and the number of observations is held constant across all models (N=5,858).

sport participation predicts the occupation of respondents' primary job. Research on gender and work consistently finds that women are disproportionately concentrated in occupations and types of work that are devalued, less prestigious, characterized by lower pay, and labeled as feminine. While findings from a limited number of studies suggests that sport participants are more likely to challenge gender norms by enrolling in science and math courses (Hanson and Kraus 1999; Pearson, Crissey, and Riegle-Crumb 2009), research on the occupational outcomes of participants and non-participants is even more scarce. In a study of *collegiate* athletes at elite institutions, Shulman and Bowen (2001) find that male participants were more likely than other male students to work in the for-profit sector or to be self-employed. In contrast, female collegiate athletes were disproportionately concentrated in the not-for-profit and governmental sectors (53 percent of sport participants worked in the for-profit sector as compared with 60 percent of females in the overall student body). The authors point to changes over time, however, and differences among female sport participants and non-participants were not significant for the most recent (1989) cohort.

Figure 4.4 (males) and Figure 4.5 (females) compare the proportion of sports participants and non-participants in each occupational category. As respondents' primary occupations may change from one survey year to the next, I select data from 2004, when most respondents are 30 to 31 years old, to illustrate the overall trend in occupational categories throughout young adulthood.

Figure 4.4 shows significant occupational differences between male high school sport participants and non-participants (Pearson chi-square test, $p=.06$). A similar

Figure 4.4 Males' Primary Occupations (2004) by Sport Participation

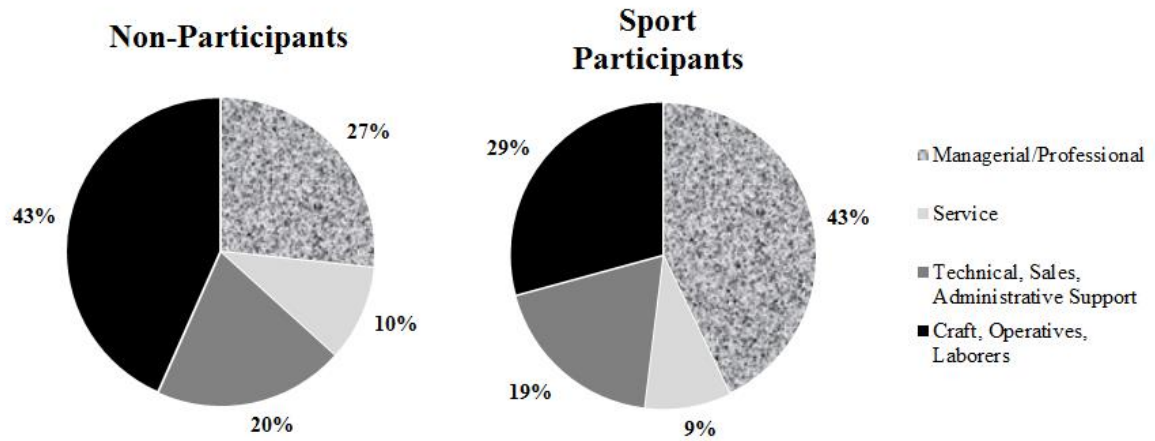
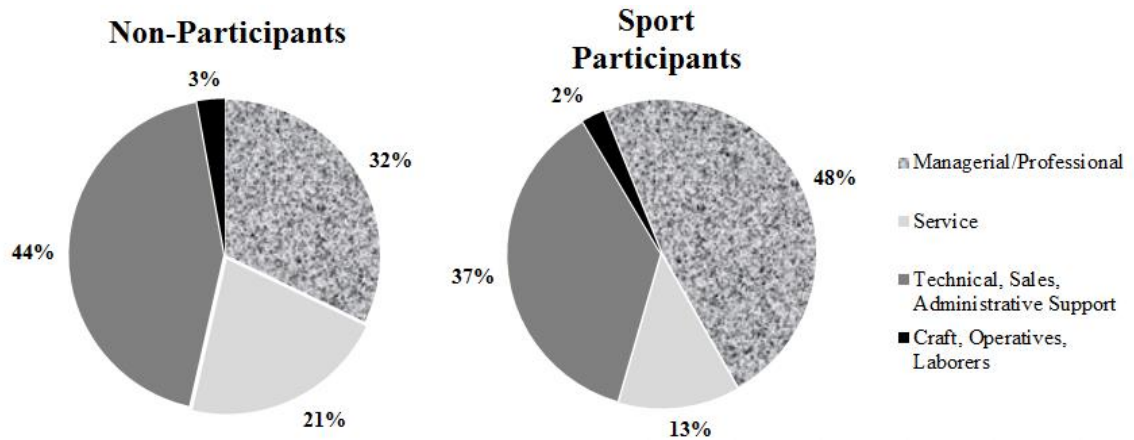


Figure 4.5 Females' Primary Occupations (2004) by Sport Participation



percentage of male sport participants and non-participants work in service (shown in light grey) and technical, sales, and administrative support (shown in dark grey) positions.

Large differences emerge, however, in the distribution across managerial and professional, and craft, operative, and laborer positions. As illustrated by the black segment of the pie chart, 43 percent of non-participants work in craft, operative, or laborer positions, as compared to only 29 percent of high school sports participants.

Across all survey waves of young adulthood, this difference ranged from 13 to 19 percent. As shown by the black and white speckled segment, sport participants were more highly concentrated in managerial and professional occupations (43 percent versus 27 percent of non-participants).

High school sport participation is also associated with occupational differences among females (Pearson chi-square test, $p=.03$). As demonstrated by the black segment of the pie charts shown in Figure 4.5, few females in the YDS work in craft, operative, or laborer positions. Though a smaller percentage of high school sport participants (37 percent) work in technical, sales, and administrative support positions (44 percent of non-participants), no clear pattern was observed when taking into consideration all young adult survey waves. Consistently, female high school sport participants were more highly represented in managerial and professional occupations (nearly half of all sport participants as compared to one-third of non-participants). Sport participants were also less likely to work in service jobs: 13 percent versus 21 percent, respectively.

While Figure 4.4 and Figure 4.5 show differences in primary job occupations of sport participants and non-participants, a multivariate analysis is necessary to determine whether this relationship is spurious. For example, sport participants' more advantaged social class background may leave youth better prepared for more prestigious or professional occupations. Table 4.4 shows the results of a multinomial logistic regression predicting the occupation of respondents' primary job in 2004, when most respondents were 30 or 31 years old. In this analysis, each occupational category is compared with managers, officials, and professionals. Models are run separately for males and females.

Table 4.4 Multinomial Logit Predicting 2004 Job Category (manager/professional as reference category)

	<i>Not Employed</i>		<i>Service</i>		<i>Technical/Sales</i>		<i>Craft/Laborers</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
Sport Participation	-.543 (.591)	-.657 [#] (.388)	-.050 (.640)	-.097 (.442)	-.396 (.471)	-.100 (.330)	-.335 (.440)	.200 (.869)
<i>Demographic Characteristics</i>								
White	-1.850** (.689)	.229 (.436)	-1.508* (.746)	.424 (.516)	-.273 (.693)	.547 (.395)	-1.039 [#] (.606)	-.315 (.913)
Parental Education	.144 (.132)	.021 (.091)	-.064 (.151)	-.002 (.104)	.011 (.097)	.056 (.073)	-.177 [#] (.100)	-.077 (.204)
Family Income	-.116 (.147)	.004 (.091)	-.150 (.169)	.077 (.102)	-.164 (.116)	-.005 (.075)	-.108 (.112)	.125 (.192)
<i>High School Characteristics</i>								
Closeness to Father	.243* (.113)	-.019 (.062)	.277* (.122)	-.027 (.071)	.037 (.081)	-.021 (.053)	.150 [#] (.079)	.105 (.141)
Grade Point Average	-.234 [#] (.132)	.166 [#] (.095)	-.090 (.151)	-.163 (.102)	-.241* (.109)	.136 [#] (.081)	-.163 (.103)	-.176 (.207)
<i>Young Adult Characteristics</i>								
Partner (not work full-time)	.416 (.804)	-.505 (.615)	-.660 (.797)	-1.109 (.854)	.367 (.485)	.025 (.503)	.133 (.481)	.404 (1.231)
Single	1.992** (.742)	-.511 (.425)	1.149 (.752)	-.215 (.465)	-.089 (.599)	-.052 (.341)	.094 (.537)	.176 (.881)
Children	.749 (.671)	1.294** (.441)	1.372 [#] (.725)	.725 (.487)	.440 (.497)	.412 (.333)	.391 (.469)	-.021 (.908)
Attending School	1.129 (.695)	-.265 (.414)	.925 (.740)	.002 (.455)	.083 (.579)	.005 (.333)	.748 (.546)	.747 (.826)
Years Education	-.477** (.186)	-.439*** (.128)	-.555** (.196)	-.441** (.150)	-.182 (.136)	-.494*** (.110)	-.626*** (.138)	-.348 (.297)
Intercept	3.787 (2.814)	3.913* (1.925)	6.030 [#] (3.111)	5.994** (2.298)	4.236* (2.157)	4.892*** (1.609)	12.168*** (2.249)	3.212 (4.431)

Standard errors in parentheses

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$

Females: $N=343$, log likelihood=-435.643***, pseudo $r^2=.091$

Males: $N=242$, log likelihood=-290.488***, pseudo $r^2=.178$

Among males, sport participation, net of other covariates, does not predict working in professional/managerial jobs as compared to other occupations. Similarly, female sport participants are somewhat less likely to be out of the labor force than work in managerial/professional jobs, but this effect falls short of standard significance levels net of other covariates ($p < .10$).³² Although this sample is relatively small as compared to models that utilize all survey waves during young adulthood, several characteristics are associated with occupational outcomes. While none of the demographic characteristics are associated with females' occupations, white males, as compared with racial minorities, have lower odds of not being employed ($\beta = -1.850$) or working in sales positions ($\beta = -1.508$) as compared to managerial/professional jobs. It is not surprising that whites are overrepresented in professional jobs, due to well-documented labor force discrimination (Maume 1999; Tomaskovic-Devey 1993). It is intriguing, however, that this effect is not observed among females in this sample.

³² In simpler models, sport participation among males reduced the odds of non-employment and working in craft, operative, or laborer positions as compared to managerial/professional occupations. This effect is reduced to non-significance, however, with the addition of several key variables. Most notably, baseline grade point average, measured in ninth grade, renders this relationship non-significant. A similar pattern is observed for females: in reduced models, sport participants have lower odds of working in the service sector, as compared to managerial/professional occupations. These findings suggest that differences observed in Figure 4.4 and Figure 4.5 may be driven by underlying characteristics between high school sport participants and non-participants.

As with demographic characteristics, grade point average and paternal relationships are associated with males', but not females', occupations at standard significance levels. Males who were closer to their father during the ninth grade are more likely to be out of the labor force or work in service jobs as compared to managerial occupations. Males with higher grade point averages are less likely to work in technical or sales occupations as compared to managerial/professional occupations.

Not surprisingly, young adult family and educational characteristics are more strongly associated with 2004 occupation than demographic or high school characteristics. As compared to managerial/professional jobs, mothers are 265 percent more likely ($e^{1.294}=3.647$) to not work at age 30. Among males, being single is associated with greater odds of non-employment as compared to working in managerial and professional occupations. For both males and females, occupational sorting is closely linked to educational attainment. Net of other covariates, additional years of education increase the odds of working in managerial/professional positions as compared to non-employment, service jobs, technical/sales occupations (females only), and craft/laborer positions (males only).

In supplemental analyses, I examine whether the specific contexts of sport participation are associated with the occupation of respondents' primary job. Sport context does not significantly change the results shown in Table 4.4 for males. Among females, however, participation in school-sponsored varsity or junior varsity sports (i.e., "formal" sport participation) and participation in team sports increased the odds of

working in managerial/professional occupations as compared to not working for pay (not shown, available by request).

This analysis offers some support that female sport participants are more likely to work in managerial or professional occupations than not work at all. Among employed respondents, however, I do not find robust evidence that sport participation increases the likelihood of working in professional occupations over other occupational categories. This is not to say that sport participation does not affect career trajectories, but perhaps these occupational categories are too broad to capture meaningful differences in the nature of respondents' work. For example, jobs within the service sector require a wide range of skills and experience. This extensive category includes medical assistants and other healthcare support occupations as well as protective service workers, such as fire fighters and police officers. Though the previous analysis is certainly informative, a more nuanced analysis is warranted.

Male-Dominated Institutions: Linking Sport and Work

In this section, I explore whether sport participants are more likely to work in male-dominated fields. By focusing on industry sex ratio, I am better able to investigate whether sport participation encourages, or at least provides socialization that fails to discourage, girls from pursuing male-dominated work. Intuitively, females, on average, work in industries characterized by higher percentage of female workers. As shown in Figure 4.6, industry sex ratio varies little for sport participants (indicated by the solid black lines) and non-participants (indicated by the dashed lines).

Taking into consideration sport context, I find no significant differences in industry sex ratio by level of high school sport participation or when distinguishing between team and individual sports. As Figure 4.7 illustrates, I do find that females who participate in contact sports during high school work in industries that are characterized by a higher percentage of males throughout young adulthood. In this analysis, non-participants include respondents who participate in non-contact sports *and* respondents who do not participate in any high school sports. Among females, the mean difference in the industry sex ratio is statistically significant in five of the ten survey waves administered during young adulthood.³³

Table 4.5 investigates whether these differences exist net of other independent and control variables. In order to take into consideration all years of young adulthood, I use a multilevel mixed-effects regression.³⁴ In Model 1, contact sport participation among females is negatively associated with the proportion of females in their primary job industry. In other words, contact sport participants, as compared to females who did not participate in contact sports, work in industries with nearly 4 percent less females, on average, net of other characteristics. This effect is not diminished by the inclusion of time-varying characteristics measured during young adulthood (see Model 2).

³³ T-tests reveal significant differences between female contact sport participants and all other females in the percentage of female workers in respondents' primary job industry in 1999 ($p < .01$), 1997 ($p < .05$), 1998 ($p < .05$), 2003 ($p < .05$), and 2005 ($p < .10$).

³⁴ In supplemental analyses, I calculate the intraclass correlation coefficient (ICC) using the random-effects parameters to determine the proportion of the variance within versus between individuals. I find that nearly half of the total variance in industry sex ratio among both males and females is at the person level, an amount that warrants the use of multilevel modeling.

Figure 4.6 Industry Sex Ratio by Sex and Sport Participation (1995-2007)

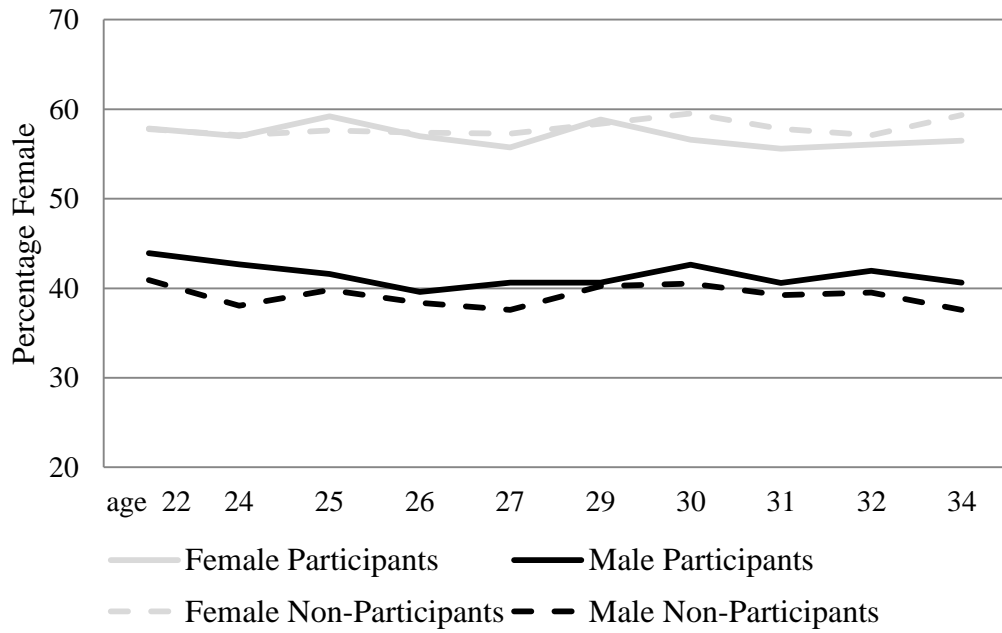


Figure 4.7 Industry Sex Ratio by Sex and Contact Sport Participation (1995-2007)

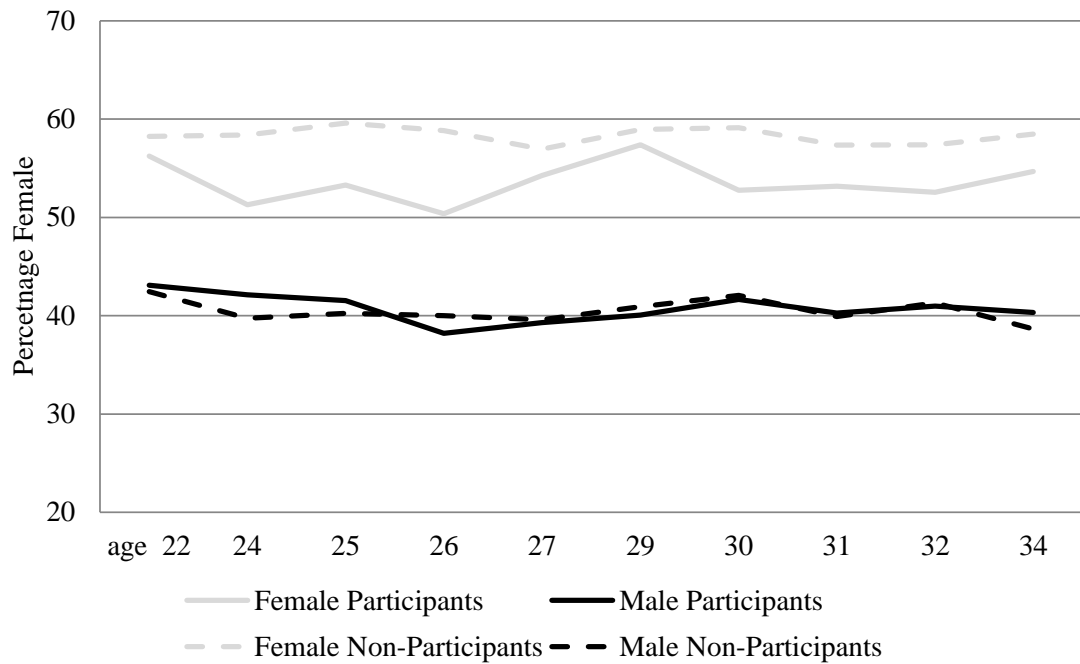


Table 4.5 Multilevel Mixed-Effects Regression Predicting Young Adult Industry Sex Ratio (1995-2007)

	<i>Model 1</i>		<i>Model 2</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
<i>Sport Participation</i>				
Contact Sport	-2.180 (1.888)	-3.899* (1.985)	-1.784 (1.831)	-3.937* (1.970)
Non-contact Sport	1.469 (1.949)	1.029 (1.623)	.993 (1.899)	.721 (1.620)
<i>Demographic Characteristics</i>				
White	-6.536** (2.220)	1.320 (1.965)	-6.862*** (2.155)	1.582 (1.960)
Parental Education	.553 (.390)	-.283 (.361)	.302 (.386)	-.358 (.367)
Family Income	.385 (.458)	.621 (.388)	.345 (.445)	.612 (.386)
<i>High School Characteristics</i>				
Control Orientation	-.287 (.284)	-.133 (.251)	-.311 (.276)	-.134 (.249)
Grade Point Average	1.633*** (.386)	-.638 [#] (.373)	1.352*** (.389)	-.637 [#] (.378)
<i>Young Adult Characteristics</i>				
Partner (not work full-time)			-.377 (.991)	-.265 (1.210)
Single			-.589 (.915)	-2.038** (.763)
Children			-1.437 (1.046)	.693 (.968)
Attending School			.994 (.802)	2.100** (.704)
Work Hours			-.149*** (.037)	-.028 (.034)
Years Education			.632 [#] (.349)	.251 (.339)
Survey Wave	-.093 (.104)	-.101 (.096)	.041 (.134)	-.180 (.122)
Intercept	31.731*** (7.666)	67.147*** (6.863)	34.385*** (7.952)	66.421*** (7.418)
<i>Random-effects Parameters</i>				
Between-respondent variance	171.730*** (16.421)	172.074*** (14.705)	159.501*** (15.664)	168.869*** (14.497)
Within-respondent	176.835***	199.112***	176.398***	198.180***

variance	(5.737)	(5.671)	(5.737)	(5.647)
Observations	2199	2842	2199	2842
Log Likelihood	-9115.1***	-11926.4 [#]	-9103.3***	-11917.4**
<hr/>				
Standard errors in parentheses				
*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$				

For males, industry sex ratio is also associated with race and early high school grade point average. White males, on average, work in industries with a lower percentage of female workers as compared to racial minorities. Males who performed better academically during the ninth grade worked in industries with a larger percentage of female workers. This relationship operates in the opposite direction for females: higher baseline grade point average is associated with work in industries with a lower percentage of female workers ($p < .10$). Taken together, these patterns suggest that greater educational attainment is associated with work in more gender-balanced industries, though specific work roles may vary by sex or gender.

Females' relationship status and school attendance are also associated with industry sex ratio. Among females, being single ($\beta = -2.038$) is associated with a *decrease* in the percentage of female workers in respondents' primary job industry, while school attendance ($\beta = 2.100$) is associated with an *increase* in the percentage of female workers. Lastly, males who work longer hours are more likely to work in industries with a lower percentage of female workers.

Earlier in the chapter, I find that sport participants are more likely to work in the labor force than non-participants. As such, it is possible that the estimates of industry sex ratio, which are limited to employed respondents, may be biased by selection into the

labor market. Because industry sex ratio is only available for working respondents, I use a generalization of Heckman's (1976) method for modeling selective samples to model labor force participation and industry sex ratio simultaneously. This technique allows for interdependence in the processes leading to labor force participation and industry sex ratio, and adjusts the estimates of industry sex ratio to account for unmeasured factors affecting labor force participation. In this analysis, I find a significant correlation between the error terms of these two equations (denoted by the Greek symbol ρ). In other words, many of the same factors that contribute to sport participants' greater likelihood of being employed are also associated with industry sex ratio. The difference in industry sex composition among high school sport participants is due, in part, to their greater likelihood of being employed. When these two models are properly specified, however, the correlation in error terms (ρ) is reduced to non-significance (not shown, available by request).

Summary

Chapter 4 examines the effects of sport participation on labor force participation, occupational categories, and industry sex ratio. Although sport participants differ from non-participants along a number of underlying characteristics as demonstrated in Chapter 3 (e.g., family socioeconomic status and baseline grade point average), high school sport participation is statistically associated with labor force participation net of individual and background characteristics. This relationship is partially mediated by sport participants' greater educational attainment as compared to non-participants. This effect is strongest

for participants in varsity or junior varsity sports, team sports, and non-contact sports. In addition to work status, high school sport participation is also linked to the type of young adult work. In particular, females who participate in contact sports are more likely to work in industries characterized by a greater percentage of male workers. High school sport participation is not related to type of occupation, net of relevant covariates.

CHAPTER 5: DOES IT PAY TO PLAY?

The study of inequality and social stratification has been a central dimension of sociological research for the last century. Blau and Duncan's classic model of status attainment (1967), for example, emphasizes the transmittal of attainment across generations, where parental education and occupational attainment is a strong predictor of children's attainment. Within this extant literature, researchers have increasingly studied income inequality and pathways of attainment, focusing on differences based on race (e.g., Grodsky and Pager 2001) and sex (e.g., Marini and Fan 1997). Recent research has also begun to move beyond gender and race inequality, highlighting the greater variability in earnings within groups than between them (see Leicht 2008).

While Chapter 4 focused on labor force participation and the nature of young adult work, the present chapter examines the relationship between high school sport participation and socioeconomic attainment. Specifically, I explore whether sport participation is associated with (1) logged biweekly earnings; (2) logged annual household income; (3) supervisory authority; and, (4) neo-Marxian social class categories.

Logged Biweekly Earnings

Researchers who study income inequality have documented a large gender gap in earnings, where women, on average, receive approximately seventy to eighty cents for every dollar men earn (Gayle and Golan 2012; Hegewisch, Williams, and Edwards 2013). Using data from the National Longitudinal Survey of Youth, Marini and Fan

(1997) measure gender differences in wages at career entry, when differences in human capital are at their lowest and the gap in earnings should be much smaller than later in adulthood. The authors find that from 1979 to 1991, women earned 84 cents to every dollar men earned.

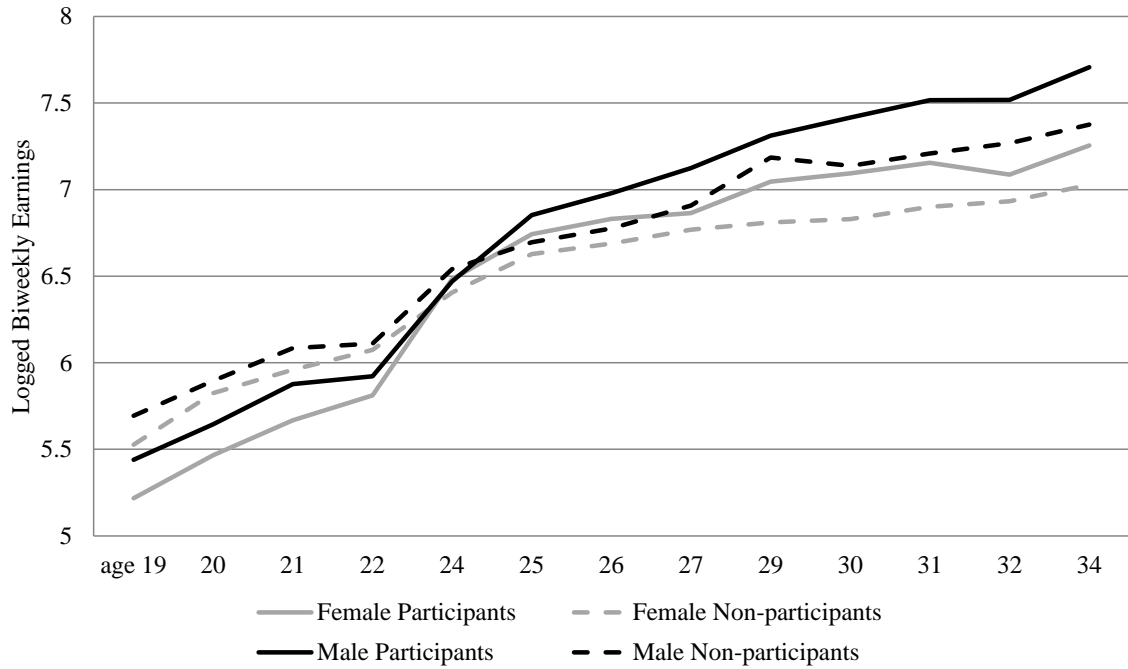
While little empirical research has explored the relationship between high school sport participation and occupational segregation or industry sex composition, a number of studies have explored its relationship with future earnings. This body of literature has produced mixed findings. While some analyses have found no significant correlation between high school sport participation and earnings (e.g., Howell, Miracle, and Rees 1984), others show a large premium associated with participation (e.g., Long and Caudill 1991; Picou, McCarter, and Howell 1985). Barron, Ewing, and Waddell (2000), for example, find that males who participated in high school sports earned 12 to 31 percent more than non-participants at age 32. Similarly, using a sample of males between the ages of 25 and 32 years old, Ewing (2007) estimated that sport participants earned about 6 percent (or \$1,000) more than non-participants, and were more likely to receive benefits such as retirement, medical insurance, paid vacation, and parental or sick leave. In contrast, Howell, Miracle, and Rees (1984) found no wage premium associated with sport participation one year and five years after high school graduation. In explaining this null finding, the authors speculate that too little time had passed to capture any benefits associated with sport participation.

This body of research has several limitations. Many existing studies focus exclusively on men (Barron, Ewing, and Waddell 2000; Ewing 1995; 1998; 2007;

Howell, Miracle, and Rees 1984; Otto and Alwin 1977). Those studies that do include women are often outdated, focusing on the effect of sport participation for women prior to the passage of Title IX in 1972. For example, Picou, McCarter, and Howell (1985) use data from a cohort of individuals who were high school students in 1966. Similarly, Long and Caudill (1991), examine the effect of sport for students who participated in collegiate sports in 1971. Both studies find no relationship between high school sport participation and women's earnings, yet considerable changes have occurred since that time in both the context of sport participation and women's labor force participation. In this section, I use YDS data to replicate analyses from past studies that consider the relationship between sport participation and young adult earnings for both males and females. Moreover, I also present the results of longitudinal analyses of earnings using innovative methods that, to date, have not been used to model this relationship. Multi-level modeling is superior to past techniques used to measure the effect of high school sport participation on earnings because it allows earnings and other independent variables—such as family characteristics, work hours, and educational attainment—to vary throughout young adulthood.

Figure 5.1 shows logged biweekly earnings for male and female high school sport participants and non-participants through young adulthood. The grey portion of the figure—ages 19 through 22—corresponds to the four years immediately following high school. During these typical college years, and prior to adjusting for background and family characteristics, males and females who did not participate in high school sports

Figure 5.1 Young Adults' Logged Biweekly Earnings (1995-2007)



report higher earnings than their peers. Here, sport participation appears to play a greater role in structuring earnings than sex.

While non-participants initially fare better economically than sport participants, this pattern begins to shift when respondents are in their early twenties. By the time respondents reach their mid-thirties, sport participants outperform those who did not participate in high school sports. Male high school sport participants reported the highest earnings, followed by male non-participants, female participants, and female non-participants. In contrast to the years immediately following high school, males, on average, report higher biweekly earnings than females, regardless of their involvement in high school sports.

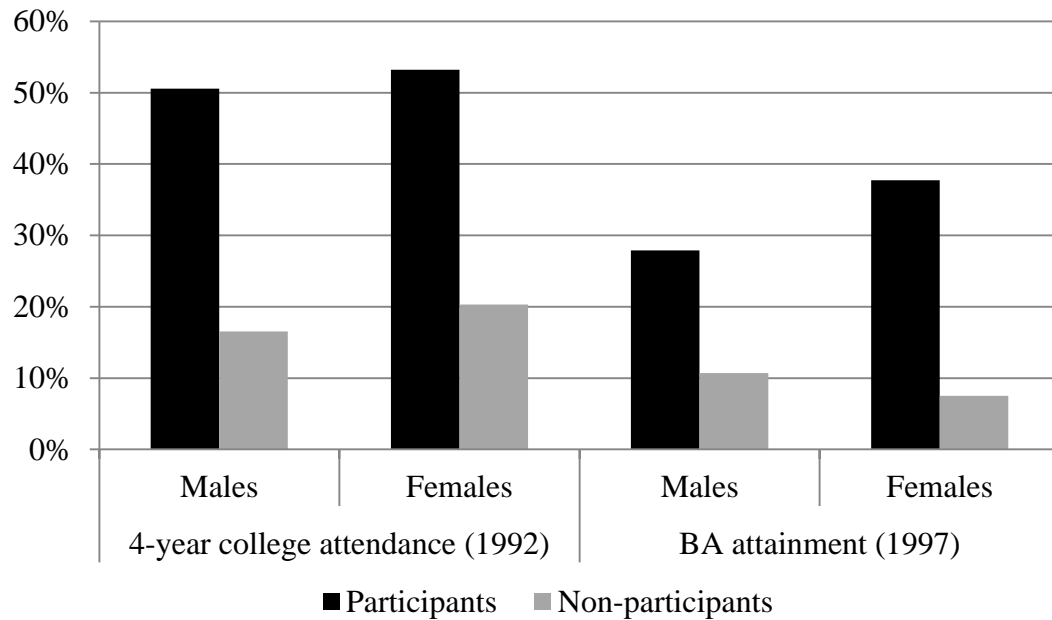
Table 5.1 Logged Biweekly Earnings by Sex and Sport Participation

	<i>Age 19</i> <i>(1992)</i>	<i>Age 22</i> <i>(1995)</i>	<i>Age 29</i> <i>(2002)</i>	<i>Age 34</i> <i>(2007)</i>
<i>Females</i>				
Participants	5.218	5.811	7.046	7.255
Non-Participants	5.527	6.074	6.811	7.027
Difference	- \$66.90***	- \$100.67**	+ \$239.91**	+ \$289.00*
<i>Males</i>				
Participants	5.439	5.922	7.311	7.707
Non-Participants	5.693	6.110	7.185	7.376
Difference	- \$66.76**	- \$76.88	+ \$176.28[#]	+ \$626.38**

*** $p < .001$, ** $p < .01$, * $p < .05$, [#] $p < .10$ (two-tailed tests).

To aid in the interpretation of logged biweekly earnings throughout young adulthood, the difference in dollar earnings is computed for key survey waves in Table 5.1. For both males and females, sport participants' biweekly earnings is approximately \$67 less than non-participants' one year after high school. By age 22, female non-participants continue to report higher biweekly earnings than high school sport participants, a difference that had grown to approximately \$100. Among males, however, this difference was not statistically significant. In 2002, when YDS respondents were in their late twenties, this pattern had shifted considerably. Here, female participants earn approximately \$240 more than non-participants every two weeks, and male participants' biweekly earnings are \$176 ($p < .10$) more than non-participants. Lastly, at age 33-34, sport participants earned considerably more than non-participants: females reported earning an additional \$289 every two weeks, while males reported an additional \$626. Over time, this amounts to considerable differences in earnings; assuming consistent earnings carried over the entire year, this difference amounts to over \$7,500 for female sport participants and nearly \$16,300 for male participants in 2007 alone.

Figure 5.2 Educational Attainment of Sport Participants and Non-participants



A likely explanation for this overall trend is that high school sport participants are more likely than non-participants to pursue post-secondary education. Students, particularly those attending school full-time, may work significantly less hours than non-students, thus decreasing their overall biweekly earnings during the college years. As shown in Figure 5.2, both male and female high school sport participants were significantly more likely than non-participants to enroll in a four-year college or university immediately following high school (1993) and to obtain a bachelor's degree by age 23 or 24 (1997).

In order to ensure that sport participants have greater educational attainment above and beyond social class and other precursors to high school sport, I model this relationship directly. In Table 5.2, I predict educational attainment at three points during young adulthood: 1995 (age 22), 2000 (age 27), and 2007 (age 34). As shown, parental

Table 5.2 OLS Regression Predicting Young Adults' Educational Attainment

	1995	2000	2007
High School Sport Participation	.175 [#] (.101)	.351** (.123)	.467** (.154)
<i>Demographic Characteristics</i>			
White	.078 (.130)	-.034 (.151)	-.026 (.194)
Female	.098 (.096)	.153 (.115)	.117 (.142)
Parental Education	.075*** (.022)	.176*** (.027)	.249*** (.033)
Family Income	.072** (.025)	.091** (.030)	.054 (.037)
Number of Siblings	-.020 (.039)	.028 (.049)	.121* (.060)
<i>High School Characteristics</i>			
Closeness to Mother	-.022 (.019)	.026 (.023)	-.027 (.029)
Closeness to Father	.007 (.018)	.005 (.023)	.027 (.027)
Control Orientation (wave 1)	-.005 (.016)	.016 (.020)	.020 (.023)
Grade Point Average	.145*** (.023)	.252*** (.028)	.245*** (.035)
Educational Aspirations	.042 [#] (.025)	.130*** (.031)	.149*** (.039)
Intercept	10.708*** (.458)	7.841*** (.551)	7.597*** (.677)
Observations	594	663	517

Standard errors in parentheses

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$

education and income, ninth grade GPA, and educational aspirations (measured during the ninth grade) are strong predictors of respondents' educational attainment in young adulthood. Despite these powerful controls, I find a direct effect of high school sport participation on education that increases in size over time. In 1995, I observe less variation in educational attainment, as many respondents are still enrolled in school.

Moreover, educational attainment, under the current operationalization, does not increase

until a degree is matriculated. By 2007, when respondents are in their mid-thirties, sufficient time has passed to allow individuals to complete advanced degrees, and there is greater variation in years of education in this wave.

The higher educational attainment of participants likely mediates the relationship between high school sport participation and earnings. The returns associated with a college degree have been well-documented elsewhere (e.g., Brand and Xie 2010), and the U.S. Census Bureau estimates that college graduates, on average, earn over \$20,000 more per year than those with only a high school diploma (Crissey 2009).

To further test this relationship, and to examine whether the gap in earnings illustrated in Figure 5.1 can be attributed to unobserved differences between participants and non-participants, such as family socioeconomic status, I next consider the role of high school sport participation, demographic and high school characteristics, and family and work characteristics on logged biweekly earnings in 2007. At this time, respondents are in their early to mid-thirties, and the earnings gap between participants and non-participants is quite pronounced (see Figure 5.1).

Model 1 of Table 5.3 echoes the findings discussed above: sport participation is associated with higher biweekly earnings in 2007, while females report lower biweekly earnings. This model also includes an interaction term between sport participation and sex in order to determine whether the relationship between high school sport participation and earnings is similar for males and females. This is indeed the case, as the *Female*Sport Participation* effect is not statistically significant.

Table 5.3 OLS Regression Predicting 2007 Logged Biweekly Earnings

	(1)	(2)	(3)	(4)
High School Sport Participation	.320** (.114)	.236* (.116)	.082 (.109)	.020 (.109)
<i>Demographic Characteristics</i>				
White		.090 (.103)	.083 (.094)	.086 (.092)
Female	-.320** (.119)	-.330** (.118)	-.210 [#] (.109)	-.232* (.107)
Female*Sport Participation	-.165 (.152)	-.162 (.150)	-.009 (.140)	.026 (.138)
Parental Education		.018 (.018)	.024 (.016)	.001 (.017)
Family Income		.032 [#] (.019)	.017 (.018)	.011 (.018)
<i>High School Characteristics</i>				
Control Orientation (wave 1)		.021 [#] (.013)	.013 (.012)	.013 (.011)
Grade Point Average		.024 (.018)	.028 [#] (.017)	.009 (.017)
<i>Young Adult Characteristics</i>				
Partner (not work full-time)			.142 (.095)	.135 (.093)
Single			-.023 (.085)	-.006 (.083)
Children			-.001 (.084)	.024 (.083)
Attending School			-.046 (.078)	-.093 (.078)
Work Hours			.032*** (.004)	.031*** (.003)
Years Education				.080*** (.022)
Intercept	7.404*** (.091)	6.393*** (.341)	5.231*** (.362)	4.602*** (.395)
Observations	427	427	427	427

Standard errors in parentheses

*** $p < .001$, ** $p < .01$, * $p < .05$, [#] $p < .10$

The effects of both sport participation and sex remain statistically significant net of demographic and high school characteristics in Model 2. However, the relationship between high school sport participation and 2007 biweekly earnings is rendered non-significant net of strong controls for work hours—introduced in Model 3—and educational attainment in Model 4. This analysis, while informative, does not take advantage of the rich longitudinal data provided by the YDS. As Figure 5.1 demonstrates, sport participants outpace their non-participant counterparts by the time they are in their mid-twenties, underscoring the importance of examining long-term processes of attainment. Taking advantage of the larger sample size provided by multiple observations for each respondent, the following analysis offers separate models for males and females in order to examine whether the effects of other independent variables beyond sport participation are sex-specific.

Table 5.4 presents the results of multilevel mixed-effects regression models of logged biweekly earnings when young adults are between the ages of 21 and 34. Here, the effect of sport participation remains marginally significant ($p < .10$) net of weekly work hours, school attendance, and other strong predictors of earnings. High school grade point average and parental income—both measured during the ninth grade—are positively associated with long-term earnings during young adulthood. These predictors were not statistically significant when examining earnings in 2007 only, perhaps suggesting that the significance of such early measures decrease over time.

Each young adult characteristic is a strong predictor of biweekly earnings, though some effects differ for males and females. Among males, having a partner who

Table 5.4 Multilevel Mixed-Effects Regression Predicting Young Adults' Logged Biweekly Earnings (1995-2007)

	<i>Model 1</i>		<i>Model 2</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
Sport Participation	.092 [#] (.052)	.074 [#] (.041)	.054 (.049)	.033 (.040)
<i>Demographic Characteristics</i>				
White	.096 (.064)	-.028 (.051)	.097 (.061)	-.005 (.049)
Parental Education	-.010 (.011)	.011 (.009)	-.033** (.011)	-.006 (.009)
Family Income	.024 [#] (.013)	.018 [#] (.010)	.014 (.013)	.015 (.010)
<i>High School Characteristics</i>				
Control Orientation	.006 (.008)	-.002 (.006)	.003 (.008)	-.003 (.006)
Grade Point Average	.041*** (.011)	.020* (.009)	.005 (.011)	.003 (.009)
<i>Young Adult Characteristics</i>				
Partner (not work full-time)	.063 [#] (.036)	-.090* (.039)	.046 (.035)	-.078* (.038)
Single	-.103** (.033)	-.065** (.024)	-.095** (.032)	-.058* (.024)
Children	-.006 (.037)	-.088** (.030)	.017 (.036)	-.064* (.029)
Attending School	-.165*** (.029)	-.115*** (.023)	-.185*** (.028)	-.123*** (.022)
Work Hours	.029*** (.001)	.036*** (.001)	.027*** (.001)	.035*** (.001)
Years Education			.123*** (.011)	.083*** (.010)
Survey Wave	.113*** (.005)	.099*** (.004)	.099*** (.005)	.088*** (.004)
Intercept	4.004*** (.237)	3.964*** (.182)	3.271*** (.236)	3.367*** (.191)
<i>Random-effects Parameters</i>				
Between-respondent variance	.129*** (.014)	.097*** (.010)	0.114*** (.013)	.090*** (.009)

Within-respondent variance	.232*** (.008)	.206*** (.006)	.222*** (.007)	.202*** (.006)
Observations	2154	2757	2154	2757
Log Likelihood	-1714.6***	-2007.8***	-1659.0***	-1974.0***

*** $p < .001$, ** $p < .001$, * $p < .05$, # $p < .10$, standard errors in parentheses

does not work full-time (as compared to having a partner who works full-time) is associated with higher earnings, while this characteristic, among women, is associated with lower earnings. For both sexes, single adults report lower earnings. Mothers, but not fathers, report lower earnings than their child-free counterparts. As expected, biweekly earnings increase with weekly work hours, decrease when individuals are enrolled in school, and increase over time.

Model 2 of Table 5.4 includes educational attainment as a potential mechanism through which high school sport participation affects long-term earnings. Here, years of education, which has a strong direct effect on logged biweekly earnings, mediates the effect of sport. Moreover, education also mediates the effect of ninth grade GPA and parental income observed in Model 1 for both males and females. The inclusion of respondents' educational attainment also has an unexpected effect: parents' education is negatively associated with males' earnings. In other words, after controlling for respondents' own education, males from more highly educated families report lower earnings, net of other background and time-varying characteristics.

This longitudinal analysis reveals nuances that have previously been unexplored in studies of sport and attainment. Another weakness of this existing literature is the failure to examine gradients of sport participation. Further probing this relationship, Table 5.5 explores whether the effect of high school sport participation on earnings varies

depending on sport context. Specifically, Model 1 and Model 2 examine the effects of formal and informal sport participation, Model 3 and Model 4 examine the effects of team and individual sports, and Model 5 and Model 6 examine the effects of contact and non-contact sports. All models include demographic, high school, and young adult characteristics, but are omitted from Table 5.5 due to space constraints. The results of other independent variables approximate those presented in Table 5.4.

There are theoretical reasons to expect differences in the effects of formal and informal sport participation on earnings. Varsity and junior varsity sports are highly visible to peers and the wider community, and are often highly competitive as compared to community-organized teams or leagues. Moreover, individuals often must maintain a particular grade point average in order to compete on varsity or junior varsity teams, but such restrictions to participation do not occur in the wider community. Though the vast majority of YDS respondents who reported informal participation also indicated playing on a varsity or junior varsity team, it is still worth investigating whether these forms of sport participation have similar effects on long-term earnings. As shown in Model 1 of Table 5.5, while varsity/junior varsity participation is associated with a boost to long-term earnings, informal participation, net of formal participation, is not. In fact, among males informal participation, net of formal sport participation and other controls, is associated with a decrease in logged biweekly earnings. The effect of formal participation is completely mediated by educational attainment among females, and somewhat mediated for males (see Model 2).

Table 5.5 Multilevel Mixed-Effects Regression Predicting Logged Biweekly Earnings by Sport Context (1995-2007)

	<i>Formal/Informal Participation</i>				<i>Team/Individual Participation</i>				<i>Contact/Non-contact Participation</i>			
	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>		<i>Model 4</i>		<i>Model 5</i>		<i>Model 6</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
<i>Sport Participation</i>												
Varsity/JV	.122*	.082*	.083 [#]	.040								
	(.050)	(.041)	(.048)	(.040)								
Informal Participation	-.119*	-.010	-.078	-.007								
	(.058)	(.054)	(.056)	(.052)								
Team Sport(s)					.102*	.054	.101*	.041				
					(.051)	(.041)	(.048)	(.039)				
Individual Sport(s)					.019	.033	-.020	-.015				
					(.053)	(.043)	(.050)	(.042)				
Contact Sport(s)									.098 [#]	.054	.115*	.038
									(.054)	(.050)	(.051)	(.049)
Non-contact Sport(s)									.020	.054	-.035	.014
									(.056)	(.041)	(.053)	(.040)
<i>Mediating Factors</i>												
Years Education			.121***	.083***			.124***	.084***			.124***	.083***
			(.011)	(.010)			(.011)	(.010)			(.011)	(.010)
Intercept	4.02***	3.97***	3.29***	3.37***	3.97***	3.96***	3.23***	3.34***	4.00***	3.97***	3.27***	3.36***
	(.236)	(.182)	(.236)	(.191)	(.237)	(.183)	(.236)	(.193)	(.236)	(.183)	(.235)	(.192)
<i>Random-effects Parameters</i>												
Between-respondent Variance	.13***	.10***	.11***	.09***	.13***	.10***	.11***	.09***	.13***	.10***	.11***	.09***
	(.014)	(.010)	(.013)	(.009)	(.014)	(.010)	(.013)	(.009)	(.014)	(.010)	(.013)	(.009)
Within-respondent Variance	.23***	.21***	.22***	.20***	.23***	.21***	.22***	.20***	.23***	.21***	.22***	.20***
	(.008)	(.006)	(.007)	(.006)	(.008)	(.006)	(.007)	(.006)	(.008)	(.006)	(.007)	(.006)
Observations	2145	2747	2145	2747	2154	2757	2154	2757	2154	2757	2154	2757
Number of groups	295	379	295	379	296	380	296	380	296	380	296	380

*** $p < .001$, ** $p < .001$, * $p < .05$, [#] $p < .10$; standard errors in parentheses.

Additional independent variables not shown (see Table 5.4 for approximate effects): white, parental education, family income, control orientation, grade point average, partner (not work full-time), single, children, attending school, work hours, years of education, and survey wave.

Model 3 and Model 4 examine whether team and individual sports have similar effects on earnings. Youth who participate in team sports must work together to achieve a common goal, and it is likely that team sports, in particular, socialize values that are beneficial for workplace success. On the other hand, many individual sports—such as swimming, golf, or tennis—are more commonly associated with more affluent youth (Bourdieu 1992). Net of social class and other characteristics, team sports only are associated with higher earnings during young adulthood among males. As shown in Model 4, this relationship remains statistically significant net of respondents' educational attainment. Neither team nor individual sports are significantly associated with females' earnings.

Lastly, Models 5 and 6 of Table 5.5 consider the effects of contact and non-contact sports. Contact sports are characterized by high levels of physicality, and may foster greater competition among participants, thus leading participants to prefer and excel in more competitive and financially rewarding career fields. Consistent with this expectation, contact sports, among males, are associated with higher earnings, though this relationship is not statistically significant among female respondents in the YDS.

Educational attainment, which was a strong mediator in previous analyses, does not appear to diminish the effects of contact or team sport participation among males. In fact, the effect of contact sport participation increases in both size and magnitude with the addition of this variable. Though I was unable to identify other mechanisms in my quantitative data through which these types of sport participation influence earnings, my

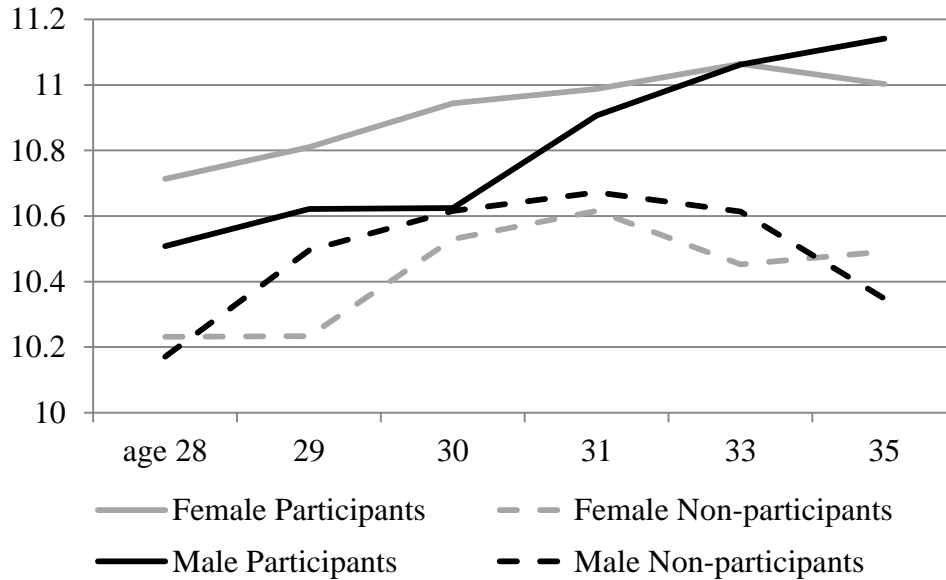
qualitative data, presented in Chapter 6, offers some insight into how sport culture influences long-term attainment.

Annual Household Income

The previous section shows that sport participation, and varsity/junior varsity participation in particular, is associated with higher individual earnings throughout young adulthood. Focusing on the household unit, however, may offer a more complete picture of the total economic resources available at the family level. Given that partners' job characteristics impact both the likelihood of spousal employment, as well as specific job characteristics such as work hours or occupational sector, an analysis of household income may produce unique findings that cannot be captured at the individual level. As discussed more fully in Chapter 2, data on household income is not available for all YDS waves, but I can estimate the effect of sport participation on logged annual household income from 2001 through 2008, when most respondents are 27 to 35 years old. As shown in Figure 5.3, this pattern differs quite substantially from the figure illustrating biweekly earnings (see Figure 5.1). With the exception of 2008, female high school sport participants—as indicated by the solid grey line—report the highest household income throughout the later years of young adulthood. Female participants are then followed by male sport participants, male non-participants, and female non-participants.

Another noteworthy trend is the slope of the income line through young adulthood. Generally, both male and female sport participants experienced steady growth throughout young adulthood, while non-participants report growth in their late twenties followed by

Figure 5.3 Young Adults' Logged Annual Household Income (2001-2008)



a decline in household income in their early thirties. This loss of income may reflect either a loss of job, decline in work hours, or other income loss for one or more family members, or could also reflect the loss of a partner or other income earner from the household. Perhaps, for example, the respondent reduced their weekly work hours or exited the labor market in response to the birth of a child. To assess whether these trends are driven by group differences in labor force participation, I plot the proportion of respondents and their partners who are employed full-time (individuals who are not married or cohabiting are coded as zero for the purposes of this analysis).³⁵ As shown in

³⁵ In supplemental analyses, I replicate Figure 5.3 for only those respondents who are married or cohabiting at each survey wave (not shown, available by request). In this analysis, differences between sport participants and non-participants are less dramatic, and male participants report an annual household income that is slightly greater than female sport participants at age 31 and 32.

Figure 5.4 Proportion of (Full-Time) Dual-Earner Couples (1995-2007)

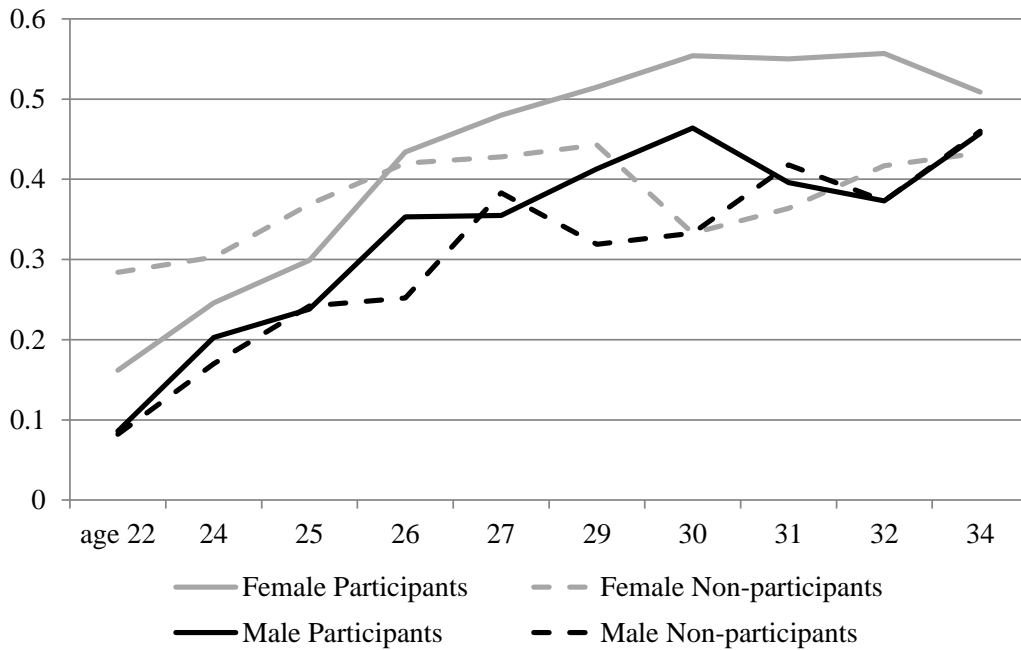


Figure 5.4, the decline in household income among non-participants cannot be explained solely by labor force participation rates or relationship status. While female high school sport participants are most likely to be a dual-earner couple where both partners work full-time, the likelihood of this arrangement among male participants is similar to the proportion of dual-earner couples among non-participants.

I next present the findings of a multilevel mixed-effects regression predicting logged annual household income in order to estimate the effects of sport participation net of other covariates. As shown in Model 1 of Table 5.6, sport participation is a significant predictor of logged annual household income net of demographic, high school, and young adult characteristics among females, but this relationship is not significant among males, net of covariates. The significant effect of sport for females holds in Model 2, when respondents' educational attainment is added to the model.

Table 5.6 Multilevel Mixed-Effects Regression Predicting Young Adults' Logged Annual Household Income (2001-2008)

	<i>Model 1</i>		<i>Model 2</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
Sport Participation	.024 (.143)	.261** (.084)	-.008 (.140)	.200* (.081)
<i>Demographic Characteristics</i>				
White	.458** (.178)	.101 (.105)	.461** (.174)	.130 (.100)
Parental Education	-.004 (.031)	.027 (.019)	-.021 (.031)	.002 (.018)
Family Income	.016 (.036)	.048* (.020)	.010 (.035)	.044* (.019)
<i>High School Characteristics</i>				
Control Orientation	.020 (.023)	-.007 (.013)	.019 (.023)	-.008 (.012)
Grade Point Average	.070* (.030)	-.000 (.019)	.045 (.031)	-.023 (.019)
<i>Young Adult Characteristics</i>				
Partner (not work full-time)	-.184** (.066)	-.237*** (.051)	-.191** (.066)	-.230*** (.050)
Single	-.359*** (.071)	-.412*** (.036)	-.365*** (.071)	-.421*** (.035)
Children	-.053 (.073)	-.138** (.044)	-.051 (.073)	-.118** (.044)
Attending School	.006 (.059)	.015 (.031)	-.006 (.060)	.008 (.031)
Work Hours	.007* (.003)	.004* (.002)	.007* (.003)	.003* (.002)
Years Education			.078** (.030)	.106*** (.019)
Survey Wave	.089*** (.012)	.093*** (.007)	.083*** (.012)	.084*** (.007)
Intercept	8.022*** (.658)	8.872*** (.367)	7.541*** (.671)	8.053*** (.381)
<i>Random-effects Parameters</i>				
b/w-respondent variance	1.011*** (.111)	.449*** (.043)	.960*** (.108)	.409*** (.040)
Within-respondent variance	.343*** (.017)	.141*** (.006)	.345*** (.017)	.141*** (.006)
Observations	1142	1470	1142	1470
Log Likelihood	-1344.03***	-1090.86***	-1340.74***	-1075.14***

Standard errors in parentheses. *** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$

Several other variables are significant predictors of annual household income in the full model (see Model 2 of Table 5.6). White males report higher household income in young adulthood, though race is not associated with income for females in the YDS. Among females, parental income is positively associated with income. Moving next to young adult characteristics, I find that mothers, but not fathers, report lower household incomes, those married or cohabiting with a partner who works full-time (omitted category) report higher incomes than other groups, and earnings also increase alongside work hours, educational attainment, and over time.

While male sport participants report the highest individual earnings, female participants report the highest annual household income. As discussed in the previous chapter, however, male participants are more likely than non-participants to be married or cohabiting with a partner who does not work full-time. Higher individual earnings may translate to greater ability for one partner to stay home and take care of children, but with dual-earner family arrangements increasingly common and the financial insecurity brought on by the Great Recession occurring shortly after this analysis ends, this analysis suggests that female participants may experience greater overall financial security, on average, than all other groups.

The effect of sport context on annual household income is examined in Table 5.7. As with Table 5.5, all background and young adult characteristics are included in these models (not shown, available by request). Again, the effects of high school sport participation are limited to females: net of educational attainment, formal sport

Table 5.7 Multilevel Mixed-Effects Regression Predicting Logged Annual Household Income by Sport Context (2001-2008)

	<i>Formal/Informal Participation</i>				<i>Team/Individual Participation</i>				<i>Contact/Non-contact Participation</i>			
	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>		<i>Model 4</i>		<i>Model 5</i>		<i>Model 6</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
<i>Sport Participation</i>												
Varsity/JV	.114 (.137)	.257** (.083)	.084 (.134)	.196* (.081)								
Informal Participation	-.098 (.160)	.036 (.109)	-.075 (.157)	.034 (.105)								
Team Sport(s)					.083 (.139)	.234** (.082)	.085 (.136)	.210** (.078)				
Individual Sport(s)					.062 (.142)	.099 (.088)	.026 (.140)	.029 (.085)				
Contact Sport(s)									-.045 (.148)	.177# (.101)	-.030 (.145)	.152 (.097)
Non-contact Sport(s)									.198 (.152)	.218** (.084)	.151 (.150)	.159# (.081)
<i>Mediating Factors</i>												
Years Education			.075* (.030)	.106*** (.019)			.077** (.030)	.107*** (.019)			.074* (.030)	.105*** (.019)
Intercept	8.04*** (.658)	8.90*** (.368)	7.57*** (.673)	8.08*** (.383)	8.02*** (.661)	8.84*** (.369)	7.54*** (.675)	7.98*** (.385)	8.00*** (.656)	8.89*** (.368)	7.55*** (.670)	8.07*** (.384)
<i>Random-effects Parameters</i>												
b/w-respondent Variance	1.01*** (.112)	.50*** (.043)	.96*** (.109)	.41*** (.040)	1.01*** (.111)	.45*** (.043)	.96*** (.108)	.41*** (.040)	1.01*** (.111)	.45*** (.043)	.96*** (.108)	.41*** (.040)
Within-respondent Variance	.344*** (.017)	.142*** (.006)	.346*** (.017)	.142*** (.006)	.343*** (.017)	.141*** (.006)	.345*** (.017)	.141*** (.006)	.343*** (.017)	.141*** (.006)	.345*** (.017)	.141*** (.006)
Observations	1138	1464	1138	1464	1142	1470	1142	1470	1142	1470	1142	1470
Number of groups	264	340	264	340	265	341	265	341	265	341	265	341

*** $p < .001$, ** $p < .001$, * $p < .05$, # $p < .10$; standard errors in parentheses.

Additional independent variables not shown (see Table 5.6 for approximate effects): white, parental education, family income, control orientation, grade point average, partner (not work full-time), single, children, attending school, work hours, years of education, and survey wave.

participation ($p < .05$), participation on team sports ($p < .01$), and non-contact sport participation ($p < .10$) are all associated with long-term household income.

Focusing on individual earnings masks the gendered effect of sport participation on total household income. Throughout their late twenties and early to mid-thirties, female sport participants are more likely than any other group to be part of a full-time, dual-earner partnership (see Figure 5.4). While male participants report the highest individual earnings, female participants fare best when looking at the household unit. In the following sections, I examine whether sport participation is also linked to workplace supervisory authority.

Supervisory Authority

Another measure of respondents' workplace success, in addition to individual earnings or household income, is the level of workplace authority. Working women often face a "glass ceiling" in regard to career advancement, and are statistically underrepresented in positions of organizational authority (Federal Glass Ceiling Commission 1995). When women reach upper management positions, they are often considered 'token' women and are expected to think and act like men (Kanter 1977). Men in traditionally female occupations, on the other hand, actually reap the rewards of a glass escalator to leadership positions (Williams 1992).

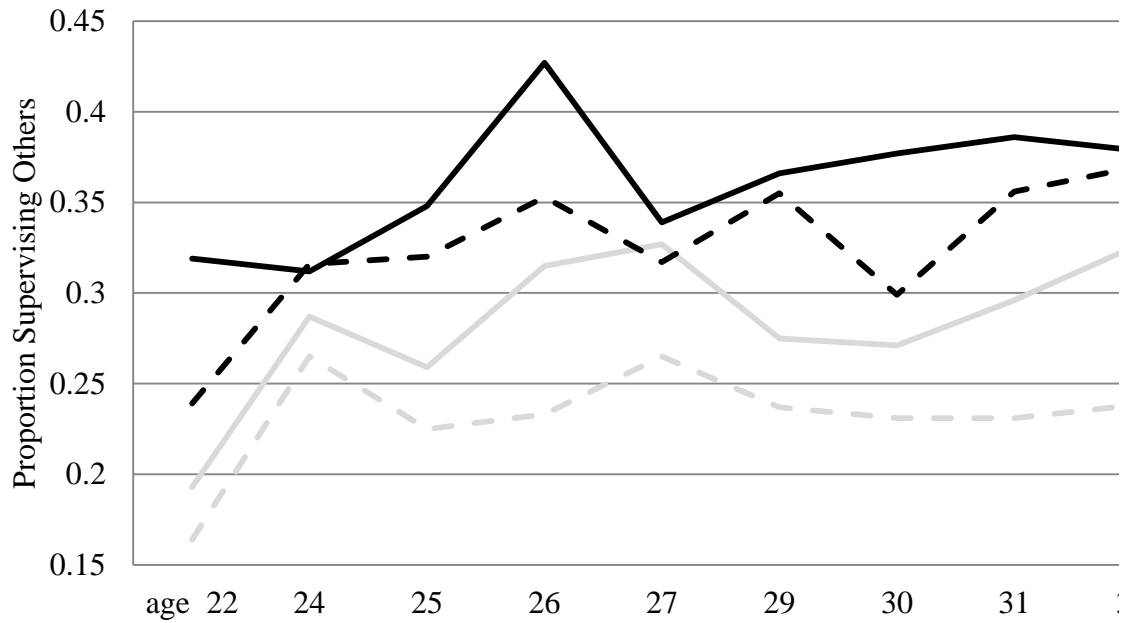
In her in-depth analysis of two large legal firms, Pierce (1995) illustrates how this gender segregation occurs. Women were typically relegated to lower paying, less prestigious paralegal positions with less office space and less privacy. Paralegals engaged

in deference and caretaking, stereotypically female characteristics. These behaviors feminized the paralegal position as a ‘naturally’ fitting job for women. Trial lawyers, on the other hand, were expected to be “rambo litigators” and aggressively use intimidation to win cases. At times, however, they also employed strategic friendliness (e.g., charm or flattery) as a tactic to manipulate others. Both techniques served to frame the position of trial lawyer as inherently male, and women trial lawyers’ techniques were typically judged by different standards than men. Women were often criticized by other trial lawyers at their firm for not being forceful or aggressive enough. When they attempted to be “rambo litigators,” however, they were ridiculed for being too aggressive, unladylike, or shrill. In contrast, when women used strategic friendliness, they were often accused of using their “feminine wiles” to get their way with witnesses or opposing counsel.

The culture of sport socializes norms and values that may help participants obtain leadership positions at work. Few studies, however, have explored the effects of sport participation for workplace power. A search of the literature found only one study that explicitly considered the relationship between high school athletics and supervisory authority. Ewing (1998) found that high school sport participants, on average, were more likely to hold supervisory positions. This study, however, fails to consider the confounding effect of background characteristics (such as sex or race) or gradients of sport participation.

As shown in Figure 5.5, both sex and high school sport participation are associated with whether or not respondents hold supervisory authority over other workers. Throughout young adulthood, male sport participants, as illustrated by the solid black

Figure 5.5 Supervisory Authority by Sport Participation and Sex (1995-2007)



line, are most likely to report supervisory authority. Males who do not participate in high school sports are less likely than male participants to supervise others, followed by female participants, and, lastly, female non-participants. Across all waves of young adulthood, the difference between participants and non-participants is particularly pronounced among females.

As shown in Table 5.8, the strong effect of high school sport participation is not robust to this particular work outcome. After controlling for background characteristics (Model 1) and adult characteristics (Model 2) in the multilevel mixed-effects logistic regression, sport participation was marginally associated with supervisory authority among females only ($p < .10$). The effect of sport is further mediated by the addition of educational attainment in Model 3.

Table 5.8 Multilevel Mixed-Effects Logit of Supervisory Authority (1995-2007)

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
Sport Participation	.334 (.236)	.417 [#] (.234)	.276 (.235)	.435 [#] (.231)	.278 (.236)	.334 (.232)
<i>Demographic Characteristics</i>						
White	-.385 (.302)	.173 (.291)	-.372 (.299)	.039 (.288)	-.372 (.299)	.091 (.287)
Parental Education	.086 (.052)	-.053 (.052)	.101 [#] (.052)	-.028 (.052)	.102 [#] (.053)	-.076 (.053)
Family Income	-.038 (.061)	.054 (.057)	-.044 (.061)	.050 (.056)	-.044 (.061)	.042 (.055)
<i>High School Characteristics</i>						
Closeness to Father	.025 (.044)	.006 (.040)	.012 (.044)	.004 (.039)	.012 (.044)	.003 (.039)
Control Orientation	.014 (.038)	.022 (.037)	.006 (.038)	.027 (.036)	.006 (.038)	.022 (.036)
Grade Point Average	.001 (.052)	-.011 (.054)	.021 (.052)	-.042 (.054)	.022 (.054)	-.093 [#] (.055)
<i>Young Adult Characteristics</i>						
Partner (not work full-time)			-.288 (.181)	-.136 (.236)	-.287 (.182)	-.090 (.236)
Single			-.307 [#] (.168)	-.020 (.145)	-.307 [#] (.168)	-.003 (.145)
Children			-.080 (.185)	-.303 [#] (.174)	-.081 (.185)	-.245 (.174)
Attending School			-.092 (.148)	-.288* (.134)	-.091 (.149)	-.314* (.134)
Work Hours			.044*** (.007)	.048*** (.007)	.044*** (.007)	.045*** (.007)
Years Education					-.006 (.058)	.223*** (.061)
Survey Wave	.042* (.020)	.033 [#] (.018)	.003 (.024)	.025 (.022)	.003 (.025)	-.004 (.023)
Intercept	-2.93** (1.066)	-2.16* (1.010)	-3.97*** (1.117)	-3.63*** (1.043)	-3.94*** (1.165)	-5.16*** (1.125)
<i>Random-effects Parameter</i>						
Respondent	2.25*** (.343)	2.74*** (.379)	2.15*** (.334)	2.59*** (.368)	2.16*** (.335)	2.54*** (.362)
Observations	2117	2809	2117	2809	2117	2809
Log Likelihood	-1212 [#]	-1414	-1188***	-1377***	-1188***	-1371***

Standard errors in parentheses

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$

For both sexes, demographic and other high school characteristics were not associated with supervisory authority in Model 1. Young adult characteristics are included as predictors in Model 2. Here, females who are attending school are less likely to supervise others. It is not surprising that students are less likely to hold organizational authority, either because they work fewer hours, are seen as less committed to the work establishment, or are increasing their educational attainment in order to meet the requirements of higher positions within an organizational hierarchy.³⁶ Surprisingly, however, school attendance is not associated with supervisory authority among males.

Model 3 of Table 5.8 also shows that educational attainment is associated with females' supervisory authority. Though this relationship is statistically significant in bivariate analyses for both sexes, it does not hold net of males' background and young adult characteristics. Supplementary analyses show that females are significantly less likely to work as supervisors in young adulthood³⁷, suggesting that females may not aspire to obtain supervisory positions or may face discrimination in proving their organizational commitment or worth as compared to males. Net of these young adult characteristics, supervisory authority is marginally associated with parental education among males and high school grade point average among females ($p < .10$).

³⁶ Both males and females who worked longer hours are more likely to hold supervisory authority.

³⁷ Across all person-years of young adulthood, 27 percent of females held supervisory positions as compared to 35 percent of males ($p < .01$). In alternative analyses, I compare the percentage of males and females who *ever* held supervisory authority at any point during young adulthood. Here, 62 percent of females and 72 percent of males worked as supervisors during at least one survey wave ($p < .01$).

Table 5.9 Multilevel Mixed-Effects Logit Estimating Young Adults' Supervisory Authority by Sport Context (1995-2007)

	<i>Formal/Informal</i>		<i>Team/Individual</i>		<i>Contact/Non-contact</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
<i>Sport Participation</i>						
Varsity/JV	.239 (.229)	.398 [#] (.228)				
Informal Sport(s)	.307 (.262)	-.466 (.303)				
Team Sport(s)			.230 (.231)	.144 (.226)		
Individual Sport(s)			.234 (.238)	.270 (.241)		
Contact Sport(s)					.165 (.246)	.078 (.276)
Non-contact Sport(s)					.277 (.257)	.420 [#] (.232)
<i>Mediating Factors</i>						
Years Education	-.000 (.058)	.217*** (.061)	-.006 (.058)	.221*** (.061)	-.008 (.058)	.218*** (.061)
Intercept	-4.010*** (1.168)	-5.120*** (1.121)	-3.934*** (1.166)	-5.096*** (1.139)	-3.903*** (1.162)	-4.989*** (1.131)
<i>Random-effects</i>						
<i>Parameter</i>						
Respondent	2.151*** (.335)	2.485*** (.356)	2.140*** (.333)	2.554*** (.363)	2.140*** (.333)	2.529*** (.361)
Observations	2108	2799	2117	2809	2117	2809
Log Likelihood	-1178.9***	-1367.8***	-1187.0***	-1370.6***	-1187.0***	-1369.8***

Standard errors in parentheses, *** $p < .001$, ** $p < .01$, * $p < .05$, [#] $p < .10$

Additional independent variables not shown (see Table 5.8 for approximate effects): white, parental education, family income, closeness to father, control orientation, grade point average, partner (not work full-time), single, children, attending school, work hours, years of education, and survey wave.

When participants are differentiated by the level and type of sport participation in Table 5.9, results suggest that the positive relationship between sport and supervisory authority among females is largely driven by varsity/junior varsity sport participation ($\beta = .398$, $p < .10$) and non-contact sport participation ($\beta = .420$, $p < .10$). The effect of other background and adult characteristics are consistent with models estimating the effects of any sport participation on supervisory authority (see Table 5.8).

A Neo-Marxian Measure of Social Class

The previous analysis shows that female sport participants are somewhat more likely to supervise others at their primary job, while supervisory authority, among males, is not significantly associated with sport participation net of other covariates. Another strategy is to examine more nuanced differences in respondents' social class. In this section, I investigate whether sport participation is associated with supervisory authority *and* control of the means of production (i.e., self-employment). Focusing on 2005 (when most respondents are 31 to 32 years old), Figure 5.6 and Figure 5.7 show the percentage of male and female YDS respondents who work as employers (self-employed and supervise other workers), petite bourgeoisie (self-employed but do not supervise others), managers (supervise others but do not own their own business), workers (work for others and do not hold supervisory authority), and belong to the surplus population (not employed or earn less than \$15,000 per year).

As shown in Figure 5.6, male sport participants are more likely to work as employers, workers, and are less likely to be in the surplus population. Among females (see Figure 5.7), sport participants are more likely to work as managers and, like their male counterparts, are less likely to be in the surplus population. Given the more advantaged backgrounds of sport participants, a multivariate analysis is necessary to understand whether young adult social class is merely a reproduction of social class origins, or whether high school sport participation, net of background characteristics, is associated with neo-Marxian class categories in young adulthood.

Figure 5.6 Males' Social Class Category (2005) by Sport Participation

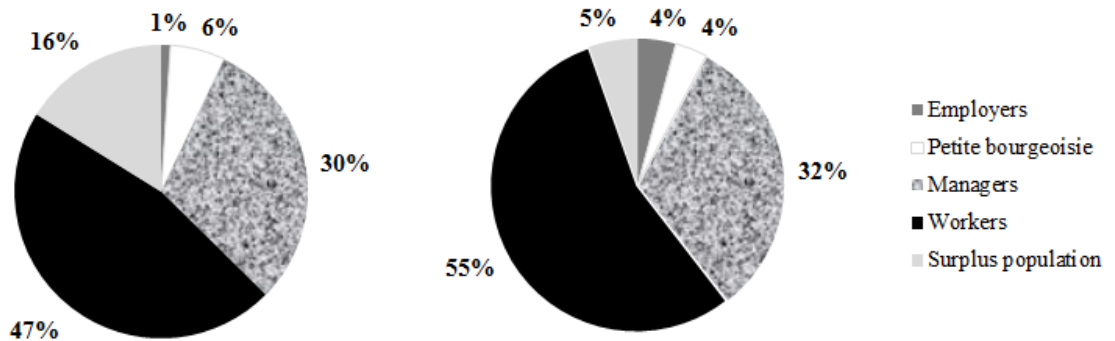


Figure 5.7 Females' Social Class Category (2005) by Sport Participation

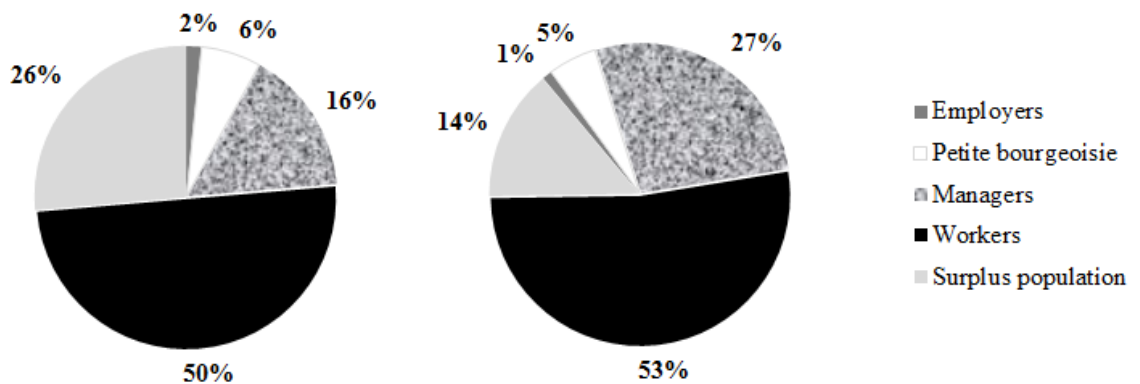


Table 5.10 presents the results of a multinomial logistic regression predicting neo-Marxian social class position in 2005. The odds of working as a manager are compared to all other groups. In this analysis, employers and petite bourgeoisie, both of whom are self-employed, are combined due to a small number of cases in each group. As shown, sport participation among females reduces the odds of belonging to the surplus population, as compared to working as a manager, net of other background and young adult characteristics. However, this effect falls short of standard significance levels in this

Table 5.10 Multinomial Logit Predicting Social Class Category (2005) (managers as reference category)

	<i>Employers & Petite Bourgeoisie</i>		<i>Workers</i>		<i>Surplus Population</i>	
	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>	<i>Males</i>	<i>Females</i>
Sport Participation	.310 (.619)	-.562 (.551)	.152 (.337)	-.493 (.329)	-.595 (.562)	-.741 [#] (.426)
<i>Demographic Characteristics</i>						
White	-.668 (.670)	1.089 (.832)	.017 (.420)	.036 (.393)	-.845 (.629)	.615 (.527)
Parental Education	.211 (.134)	.019 (.124)	-.110 (.078)	.105 (.074)	.119 (.137)	.115 (.099)
Family Income	.127 (.145)	.060 (.125)	-.010 (.087)	-.030 (.074)	.126 (.144)	-.015 (.103)
<i>High School Characteristics</i>						
Closeness to Father	-.079 (.109)	.122 (.090)	.004 (.060)	.084 (.054)	.136 (.110)	.041 (.070)
Grade Point Average	.034 (.141)	-.168 (.124)	.041 (.076)	.025 (.080)	-.108 (.119)	-.056 (.097)
<i>Young Adult Characteristics</i>						
Partner (not work full-time)	.437 (.745)	1.307 (.926)	.105 (.360)	.709 (.686)	-.040 (.812)	1.464 [#] (.771)
Single	1.758* (.738)	.094 (.628)	.298 (.406)	.151 (.354)	1.233 [#] (.662)	.799 [#] (.462)
Children	.680 (.646)	.883 (.597)	.237 (.357)	.604 [#] (.339)	-.361 (.629)	2.318*** (.553)
Years Education	-.185 (.171)	.036 (.160)	.003 (.092)	-.188 [#] (.097)	-.405* (.175)	-.277* (.130)
Intercept	-2.662 (2.468)	-3.271 (2.516)	1.247 (1.434)	1.102 (1.448)	2.256 (2.626)	.071 (2.021)

Standard errors in parentheses

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$

Females: $N=342$, log likelihood=-370.217***, pseudo $r^2=.076$

Males: $N=243$, log likelihood=-251.835*, pseudo $r^2=.084$

reduced, single wave sample ($p < .10$). Sport participation is not associated with other neo-Marxian social class categories (as compared to working as a manager).

As with high school sport participation, other background characteristics are not significant predictors of young adult social class. As compared to managers, single males are more likely to be self-employed (i.e., employers or petite bourgeoisie), and mothers are more likely to belong to the surplus population. Lower educational attainment, for both males and females, is associated with the surplus population as compared to the managerial class.

Discussion of Quantitative Findings

My quantitative findings show that high school sport participation is positively associated with a number of work outcomes. The results presented in Chapter 3 highlight the significance of selection in this analysis, an important issue that is given relatively little attention in previous research on the outcomes of sport participation. In the ninth grade, sport participants differ from non-participants along a number of underlying characteristics. Moreover, sport participation has strong effects on labor force participation. Models that estimate the effect of sport participation on socioeconomic attainment must properly specify selection into sport and selection into the labor market.

My analyses reveal a number of new empirical relationships that have not been explored in past research, or have not been tested in conjunction with strong controls for

background and young adult characteristics using advanced statistical techniques. For example, my research shows that high school sport participation is associated with labor force participation, industry sex composition, supervisory authority, and, to a lesser extent, occupations and neo-Marxian social class categories. While a number of studies have examined the effect of sport on individual earnings, the results presented in Chapter 5 show important differences when modeling individual earnings and family income. Taken together, these empirical findings support proponents' claims that sport participation can have positive effects for youth within the institution of work.

My quantitative analyses highlight the labor force benefits to expanding sport programs to serve a greater proportion of youth, particularly those at risk of lower earnings or other labor market outcomes. My findings also suggest that empirical studies on sport and attainment must be attentive to sport context. In particular, I consistently find that informal participation—such as participation in intramural sports, community-organized or church-sponsored teams or leagues, pick-up basketball or other sports organized among peers, and personal fitness—does not have the same effect as varsity or junior varsity participation. However, given that 90 percent of all high school sport participants competed at the varsity or junior varsity level (68 percent reported formal participation only and 22 percent participated at both levels), further research is needed to better understand the types of sport participation that best benefit youth in terms of young adult work outcomes.

My quantitative analyses also suggest that, for some work outcomes, the effect of sport participation may be especially empowering for women and girls. Females, but not

males, who participate in contact sports are more likely to later work in industries characterized by a higher proportion of male workers. Female high school sport participants are most likely to belong to a dual-earner couple that works full-time, and they report the highest combined household income during young adulthood. The effect of high school sport on supervisory authority is also more pronounced among females. Given these dynamics, female participants may hold greater relational power in their romantic relationships than females who do not participate in high school sports.

These findings suggest that female sport participants may be more willing than non-participants to work alongside, and hold authority over, male workers. Scholars and women's rights advocates have devoted a significant amount of attention to helping women gain access to masculine, male-dominated fields. This research points to participation in masculine institutions (i.e., sport) during youth and adolescence as one avenue for increasing participation in such fields during young adulthood and later life. As discussed elsewhere, however, women in such fields or positions of authority are not exempt from experiencing sexual harassment or sex discrimination, and in fact are more frequent targets of such unwanted behavior (McLaughlin, Uggen, and Blackstone 2012).

My study is situated within life course theory, paying particular attention to how these results are affected by historical period and life stage. In response to the passage of Title IX, as well as other cultural changes resulting from the Civil Rights era, girls' high school sport participation has increased over ten times since the early 1970s (National Federation of State High School Associations 2009). During that same time, women's labor force participation has also increased exponentially. Earlier investigations of high

school sport participation—especially in estimating its effect on earnings—have not considered how such changes may affect the relationship between sport and work. Future research should consider how more recent trends, such as the declining labor force participation among youth (Smith 2011), high unemployment rates, and the Great Recession have influenced this relationship.

The quantitative results presented above also illustrate the importance of examining long-term trends in work outcomes, as analyses at a single point in time often mask larger trends that develop through young adulthood in response to school attendance, educational attainment, and family formation. To my knowledge, no other studies of sport have looked at change in work outcomes over time. Supplemental analyses of biweekly earnings and annual household income reveal that the effect of high school sport participation increases over young adulthood.

Educational attainment is a strong mediator of many of the work outcomes examined in this study. Still, the effect of high school sport participation remains significant in many of my full models. Moreover, the relationship between sport and educational attainment can be probed further. In other words, what is it about high school sport, and formal sport participation in particular, that leads to greater attainment? Though I am limited in my ability to test other potential mechanisms in my quantitative data, Table 5.11 compares male and female sport participants and non-participants along a number of items taken from the Bem Sex-Role Inventory (Bem 1974; Holt and Ellis 1998) that are historically attributed as masculine. All measures are self-reported by YDS

Table 5.11 Comparison of Items from the Bem Sex Role Inventory (1995)

	Females		Males	
	<i>Participants</i>	<i>Non-participants</i>	<i>Participants</i>	<i>Non-participants</i>
Dominant	4.571	4.393	4.723**	4.299
Active	5.045*	4.704	5.018***	4.315
Superior	4.308**	4.015	4.714 [#]	4.454
Handle Pressure	5.040*	4.714	5.606	5.339
Self-Centered	3.618*	3.362	3.850	3.870
Confident	4.744*	4.424	5.256	4.963
Competitive	4.383**	3.887	5.149 [#]	4.743
Total Bem Score	66.374**	63.413	76.051*	73.280

*** $p < .001$, ** $p < .01$, * $p < .05$, [#] $p < .10$ (two-tailed tests).

respondents in 1995, when most respondents are 21 or 22 years old. The total Bem score is an additive index of sixteen items with response options ranging from 1 to 7.³⁸

The first item measures the degree to which respondents feel dominant (coded as “7”) or submissive (coded as “1”). On average, male high school sport participants report significantly higher dominance scores as compared to non-participants. Both male and female sport participants self-report higher scores on items measuring how strongly they feel they are active (versus passive), superior (versus inferior), and competitive (versus not competitive). All other individual items shown in Table 5.11 are significant among females only: sport participants are better able to stand up well under pressure (versus go

³⁸ Only statistically significant differences are shown in Table 5.11. The remaining nine items that are included in the Bem sex-role inventory measure the degree to which respondents feel (1) independent versus dependent; (2) persistent versus give up easily; (3) they make decisions easily versus have difficulty making decisions; (4) little need for security versus strong need for security; (5) indifferent to others’ approval versus others’ approval mattering a lot; (6) calm in a major crisis versus excitable in a major crisis; and all items measuring sensitivity: (7) unemotional versus emotional; (8) feelings not easily hurt versus feelings easily hurt; and, (9) never cry versus cry very easily.

to pieces under pressure), are more self-centered (versus devoted completely to others)³⁹, and are more self-confident (versus not at all confident). The total Bem score—including all 16 items—is larger for participants among both sexes.

The association between high school sport participation and masculine values offers some insight into the mechanisms linking sport to both educational attainment and work outcomes. Caution is warranted, however, as these items are reported several years after most respondents have graduated from high school. As such, these values may be internalized during college or at young adult jobs. In the following chapter, I draw from in-depth interviews with nine women to better understand their experiences, in their own words, in both high school sport and young adult work.

Summary

In this chapter, I explore the relationship between sport participation and young adult socioeconomic attainment. Net of the strong independent effects of work hours, survey wave, and educational attainment, analyses suggest that high school sport has lasting effects on males' individual biweekly earnings and females' annual household income. Moreover, sport is somewhat associated with females' supervisory authority and social class position as managers. This analysis underscores the importance of understanding sport and work as gendered institutions.

³⁹ Note, however, that the mean score for all groups is less than four, suggesting that all respondents associate more strongly with being devoted completely to others than being self-centered.

CHAPTER 6: THE LESSONS OF SPORT: HOW SPORT AFFECTS YOUNG

ADULT WORK

“Sports were a huge part of me...It’s just something else to get excited about and just the working together in the team sports and being competitive and maybe overcoming obstacles or, you know, super bummed that we got killed in this game but you move on and the next game could be totally different.” – Patty

The previous empirical chapters establish that high school sport participation has strong effects on young adult work outcomes. While the greater educational attainment of sport participants, on average, partially explains this relationship, a large portion of this association remains unexplained. Specifically, *why* does sport have such a lasting impact for participants’ work lives? In this chapter, I explore in-depth interview data with nine women to better understand these relationships.

At the onset of this study, the in-depth interviews were intended to divulge *how* sport affects young adult work. Interviewees were asked a variety of questions⁴⁰ designed to provide a general recollection of their sport experience: Looking back now, what do you most remember about sport? What did/didn’t you like about it? What did your coaches want you to get out of the experience? Do you still keep in touch with your teammates? What do you think you got out of playing hockey (or any other specific sport indicated by the interviewee)? Did sport affect your career decisions or goals, personality, relationships, etc.? After discussing their high school sport participation, interviewees then talked about any adult sport participation, their current job(s) and past work history,

⁴⁰ The complete interview guide is provided in the methodological appendix.

and lastly, at the end of the interview, respondents were directly asked to draw connections between sport and work.

Some women had difficulty remembering details from high school, with good reason, as over twenty years had passed since their graduation. Many women recalled what one respondent referred to as “snapshot memories” of specific interactions with coaches or teammates or gameplay, and the daily culture of the sport was often not conveyed in great detail. Some of these details were likely forgotten over time, others were taken for granted as unimportant or boring, and some were omitted, unconsciously or not, in order to present a favorable depiction of the pastime they continue to love. Several women asked if I had played sports myself, and, after responding affirmatively, I sensed they often avoided going into great detail because “you know how it is.”

I had hoped that my conversations with women would illicit deeper responses or memories surrounding the significance of their sport experience in their lives, as well as explicit connections between sport and work. Many of the women I interviewed, though claiming that sport had impacted them tremendously, were often unable to articulate how their experiences directly translated to their work lives. Instead, respondents often relied on generic scripts about the purpose or goal of sport. The popular rhetoric about the value of youth sport was often reproduced by my interviewees, but explaining *how* sport is valuable or translates into other domains was much more difficult to convey. The interview excerpts presented in this chapter offer an initial exploration into whether sport cultivates values such as hard work, cooperation, and competition. Though my interview data are useful for generating theory, the themes presented in this chapter should be

interpreted as speculative accounts of how sport might affect work. Further research is needed to test these theories and fully explain how and why sport participation is associated with the empirical patterns shown in Chapter 4 and Chapter 5.

Despite conducting only a small number of interviews, I do find substantial variation in the meaning of sport for women's high school lives as well as their current lives in their late-thirties. Some identified as athletes or jocks in high school, while others described themselves as "artsy" or "academics." Some interviewees are currently employed in high-paying positions and/or hold great organizational authority, while others are less career-driven, work part-time, or stay home with young children. This variation in current and past experiences with sport and work help to shed light on how high school sport participation affects women's lives. Given that these interviews focus on women only, however, I must caution that future research is warranted to understand gendered pathways through which sport influences participants.

The Lasting Impact of Coaches

In reflecting on their high school sport participation, interactions and relationships with coaches were crucial in determining whether women's experiences with sport were positive or negative. Amanda, who works part-time as a substitute teacher at her two children's elementary school, recalled fond memories of her time spent playing high school tennis, largely due to the fact that she "had really good coaches that were really strong female personalities, and I think that they had very good just, you know, like pro-girl philosophies." Even beyond seeing her coach as a role model, Felicia, who participated in volleyball, badminton, and swimming during high school, saw her coach

as a father figure in her life. Her father was largely absent during her childhood and adolescence due to his busy career as a University professor. Moreover, he also ran their family farm, and was often busy with that endeavor when not on campus. Felicia explained that, “The swim coach was so dedicated to us, like I saw him more [trails off]. My dad kinda wasn’t really part of my life, so I saw him more than I ever saw my father and that just really made a big difference... We’d go out for pizza and stuff after meets and he’d come along... [T]he dedication and mentorship of the coach really made it enjoyable for me.”

The quality of a coach was an important determinant of participants’ level of commitment and enjoyment in a sport. Though respondents often enjoyed *other* sport participation throughout high school, the dominant reason given for a negative sport experience was poor coaching. A common example of poor coaching was when little or no direction was given to participants. In addition to softball and karate, Sarah briefly joined her high school tennis team, but only lasted for a couple of practices before quitting. She complained that “it wasn’t organized and no one took the time to teach me how to do the score.” Though she was satisfied with her actual performance, she felt “so lost, and I felt like an idiot because I’m like, I don’t know how to score, you’re telling me I’ve got to play?” Sarah was embarrassed that she was not familiar with the rules of scoring and opted to quit the team. By assuming this basic knowledge of the game, Sarah’s coach alienated players that were there to learn about a sport that they could continue to play throughout the life course.

Bad coaching often led to a short tenure on a sport team, with participants quitting midseason or failing to return the next year. Felicia, a single, child-free adult, signed up for badminton with a friend during her sophomore year of high school. She described her coach as an “anti-role model, like how I never want to coach, be coached again.” She explained:

The coach was actually terrible. He just kind of, he was just a gigantic, really overweight man. And he would lay on his side on the ground with his head propped up and kind of, in profile, he looked like some sort of whale because his stomach was so huge. And so I just remember looking over and just thinking, ‘Ah, the whale’s watching me.’...He didn’t really coach, he’d be like, ‘Naah. Pick up the birdy and try it again, maah.’ You know, I think he just was there to get his little extra ten bucks a day or whatever he got paid to coach us.

Though Felicia remained on the badminton team longer than Sarah, finishing out her sophomore season, she did not return as an upperclassman. Felicia largely blamed her own lackluster performance as her reason for not continuing with the sport, but her coach, as an “anti-role model,” did little to aid in her improvement.

Patty enthusiastically labeled herself as an athlete while in high school. When not playing sports herself, she was often attending wrestling matches or football, hockey, or basketball games and was “fully immersed” in the sport culture. During high school, she played varsity volleyball, basketball, and softball and participated in community-organized volleyball, softball, and coed flag football. After excelling in volleyball for three years, her senior year “really ended on a bad note” after a new coach took over the team. She explained, “The coach was really bad and she didn’t know anything about volleyball. She had never played. I think she was kind of the coach because nobody else wanted to be. And it was really hard and it definitely affected my senior year which is

when you don't want it to be such a bummer. The younger years would have been a little bit different but I felt like I really ended on a bad note.”

Another form of poor coaching expressed by Mary, a stay-at-home mom, was the unequal treatment of players, either in comparison to other team members or to the equivalent boys' sport team. She participated in a number of sports during high school, playing one season of tennis, two seasons of both soccer and golf, three seasons of track and field, and was on an intramural downhill ski team at her high school. She described her golf coach as a “very very nice man...[but] he was not really into being a good coach.” She said that the boys' team, on the whole, performed better than the girls', but that “there may have been good individuals on the girls' team but I'm not sure he would have noticed.” Mary was disappointed that “almost all the attention was focused on the guys.” The environment was “very relaxed...like *everything* about it, I mean, like, make it to practice, *maybe*, bring your equipment, *maybe*. So I'm sure if it would have been more structured they would have given us more attention, but that's still a little bit disappointing.” Mary did not recall any of her high school teammates complaining about the unequal treatment. In fact, many enjoyed having freedom in practice. At the same time, this approach reinforces sexist assumptions that boys' sports are superior and should be taken more seriously by coaches, players, and fans.

What Makes For a Good Coach?

Clearly, women's commitment to sport was often hindered by poor coaching. In comparison, inspiring coaches made a positive and lasting impact on high school

participants. Not only did they increase retention rates in sport, but they also instilled a number of positive values in participants that may explain their greater workplace success. My interview data highlight a number of ways in which coaches were able to inspire participants to continue to grow as players and accomplish a given goal. Veronica, an Assistant Professor in the fine arts who played basketball, volleyball, and ran track and field during high school, had this to say of her high school basketball coach:

Sometimes it was hard and challenging, and I liked the physical part of it...pushing my body to limits and not like being out of control but just setting those challenges for myself. That was just really satisfying I guess, yeah. I mean, I didn't set them for myself, I guess the coach did. But I liked that, you know, you push a little harder or a little harder, but not too much either, he wasn't a total fascist about it or anything...He was just a great coach. He was very attentive to the abilities of each one of the players and would kind of use that knowledge to bring everyone up, not just that individual player. So there was one girl who was, she was so fast and just *fast* and he would always gauge our sprinting exercises based on her and I really appreciated that. I thought it was really good. And he did it in a way where you didn't resent her for being better. It was just like can we all aspire to that model of excellence. I thought that was pretty cool, it was a new way of thinking about exercise that was new to me.

Veronica's basketball coach used the superior skills or ability levels of more experienced or talented participants to push teammates to succeed. Similarly, Felicia's swim coach used individualized attention as a way to bring out the best in each participant:

He did so many things, I don't know if it was naturally or purposively, but it was small wins and building on things that we already had known and really tailoring everything to us as unique individuals...He didn't ever pit one of us against each other. It was always evaluated as, 'Felicia, your time, you dropped 10 seconds off your time compared to last time, great job.' Or, 'I can tell even though your asthma's bad you're hustling, so thank you.' So I would say that he did a really good job in helping us, as my yoga teacher says, keep our eyes on our own yoga mats, so not compare to girls next to us. And he also did a good job of, when we'd be in practice assigning us to lanes. So normally...the less talented people go on the outside lanes 'cause you just get more waves and stuff and they say you're, the people who are the best need the clearest path. And so clearly the people who are better were in the middle lanes but not always, 'cause there was kind of this

mentorship relationship where sometimes the people who were more experienced, they might not have been older but just had more swimming experience, they'd put people just slightly less so that you could improve. You wouldn't feel like a failure but you could improve incrementally.

Consistent with the experiences of my interviewees, “ego-oriented” coaching styles that focus on outperforming other teammates and showing preference for more skilled players is associated with increased anxiety, decreased satisfaction, and negative relationships among players (Smith, Fry, Ethington, and Li 2005). In contrast, supportive coaching of all participants can have a lasting impact on players. Felicia, for example, talked at great length about how her high school coaching continues to affect her approach to sport and physical activity during young adulthood. She explained:

My coach used to put us through little drills. Like the next ten lengths, think about the way you're positioning your hand when you pull across, or see if you can swim the entire way only taking two breaths per lap. So it was constant sort of, it was like jazz. It was like improvisation along with structure. And that sort of thinking really works for me in all realms of my life, not only swimming...I still do those little sort of mental drills in my head, like when I'm swimming even though I don't swim like a masters team, I don't have a coach, I'm always sort of self-coaching a little bit.

Alicia, an African American woman who was a member of her high school cheerleading squad and track team, agreed that coaching in sport has carried over to her adult work. Specifically, she emphasized the importance of being open to constructive criticism at her job as a school teacher. She explained, “When you're being coached someone is constantly trying to improve you as an athlete.” Alicia connected this to her job by adding that teachers, like athletes, should “be open to that constructive criticism and not close-minded...[and] open to new ideals, new innovative things.” As an example, Alicia talked about the use of technology in the classroom:

You have to be committed to be a learner, a lifelong learner because the traditional way of teaching is out the window. What you did seven years ago is not the way things are today. You have to be open, you know, and open to receiving new best practices because they're ever changing. Technology is big now. You have to be willing to learn some technology if you don't know it. A lot of people aren't technology savvy but if you're willing to learn it and give it a try then great. Professional development is huge, to just continue to grow, you know, and don't be stuck in a rut. There are so many teachers that are just stuck in the ice age, it's *sad*.

The emphasis on self-improvement was also apparent in the way Patty viewed her current work. For the past twelve years, Patty has worked as an account manager for a firm that serves as a representative for manufacturers. When asked whether she would continue working at her current workplace long-term, she replied, "I don't know. I actually keep thinking about that, like, am I going to do this forever? Would I like to try something else? And a part of me would like to try something else and just see, you know, expand my horizons a bit I guess just 'cause I don't want to just be stuck in one spot and feel like I'm not challenging myself." Patty explains that her job is very stressful, and even though she has been in the same position for years, she often feels like she is "*totally* challenging myself, oh my gosh!" Still, she continues to search job postings for a position that will allow her to challenge herself and continuously improve.

As the above interview excerpts show, sport often socializes youth to value self-improvement. The purpose of an athletic coach is to offer wisdom and expertise that will improve an individual player's or team's overall performance. Much like the classroom environment, this in turn teaches youth to be open to criticism and feedback from others in positions of authority. Moreover, the emphasis on self-improvement and individual growth in high school sports (discussed in greater detail below) carries over to other

dimensions of participants' lives. As described by Alicia and Patty, this directly applies to workers' openness to change and ability to incorporate innovative ideas, as well as challenging oneself to improve at her current position, work her way up organizational ranks, or apply her current skills to more desirable positions at other organizations.

In addition to encouraging sport participants to value and strive for self-improvement, a number of interviewees also said that their coaches nurtured leadership qualities, a skill that also relates directly to young adult work and supervisory authority. Amanda said that the leadership qualities fostered through sport benefited her work as a substitute teacher. She explained that it is important for her to take initiative and think on her feet in order to create lesson plans and lead the classroom on short notice and often with little direction provided by the regular teacher. Similarly, Veronica was proud of the fact that her coach selected her as captain of her basketball team as an underclassman.

She explained:

I was not a very good player in the sense that I didn't make a lot of points in the games...I was captain my sophomore year, and the coach had a talk with me about that because he identified in my team abilities to kind of be a leader I guess with the other girls, even though I wasn't a strong player. And that I found that satisfying. So I don't know, that doesn't really necessarily connect to basketball per se that was more just the kind of team dynamic that I guess I enjoyed.

One way that formal sport participation often differed from community-organized sports is the presence or role of coaches. Jessica, a high earning supervisor in the corporate food services industry, played on a softball team during her senior year of high school at one of the public parks near her home. In contrast to some of her school-organized participation, she described her experience on the softball team as more leisurely, pointing out "we didn't have a coach. We won some, we lost some, but it was

just, it was fun to get together with the girls and meet new people.” While many community-organized sports are more leisurely and lack coaches, the inclusion of adult participants creates opportunities for additional role models for youth in a way that school-organized sports cannot. Sarah’s dojo where she trained in karate included men and women of all different ages. She explained:

I kind of had a dysfunctional family and so the people at karate, a lot of the adults kind of took me under their wing. And then mom died when I was fourteen and so it was just like my dad and stepmother and they all knew that. So it was also kind of like a family atmosphere...I made friends with lots of people and lots of different ages, too...All the adults, they all had good jobs...So I really saw, you know, that there was lots of different opportunities out there. I mean my dad always worked and gave me a strong work ethic but it was also good to see this in those mentors.

Sarah credits her involvement in karate with keeping her from “going down the wrong path...I mean, my siblings have all been in trouble. I’m kind of like the white sheep of the black sheep family.” In her case, her sport experience directly led to her career as a police officer. In addition to her self-defense background serving as an advantage to her work as an officer, she also explains that her former police chief was one of the adult members of her dojo who took Sarah under his wing and even recommended she participate in the police explorers program during high school. She told me that karate and her involvement on the police explorers program “were the two things that really kind of saved me...I even still see some of those adults, and I still to this day thank them for how much they did for me.”

Sarah’s experience is somewhat unique in that karate was a coed sport. The overwhelming majority of the sport participation described by my interviewees were sex segregated. Sarah expressed no hesitation about practicing karate with adult men,

explaining, “I’d be sparring against grown men. But see it’s surface contact, you don’t actually *hit*, you stop right at the surface, which didn’t always mean that you didn’t get hit.” Though popular beliefs suggest that competition between the sexes is harmful to both men and women, sport scholars such as Don Sabo (2007) describe this mentality as the “myth of coed catastrophe.” In contrast, coed sports have the potential to destroy gender stereotypes as both women and men are better able to appreciate women’s athleticism (Anderson 2008; Sabo 2007). For Sarah, her experiences sparring with adult men likely contributed to her willingness to pursue work in a male-dominated field.

In addition to coaches or other adults, teammates also influence participants’ experiences with sport. In the following section, I turn to women’s thoughts on how their teammates, and teamwork, influenced them in both high school and young adulthood.

The Role of Teammates and Friends

The Camaraderie of Sport

Interviewees’ memories of high school sport participation were often dominated by the fun they had with friends on the team. Mary described her experience on her high school’s track and field team as “really social and really fun,” Veronica most enjoyed “the social aspect” of high school basketball, and Felicia “really cherished swimming and I really loved being a part of the girls...I really liked the camaraderie.” Like Felicia, Alicia most enjoyed “the camaraderie” of varsity cheerleading, describing her squad as “our own little community within our high school community.”

For some, this sense of community that was nurtured through sport spanned beyond their individual team to the larger school or even neighborhood. Speaking of her participation on her high school softball team, Sarah enjoyed the competition with other schools, saying, “We weren’t very good but I think it was just the fun playing on a team and playing different teams and going to different schools.” Similarly, Felicia also spoke of “the fun rivalry with the other schools.” She explained that the public high school which she attended “wasn’t very prosperous, so just the fact that sometimes we’d beat the richer schools with more money and fancier stuff and suits that all matched, so that was actually like, being a part of something bigger than myself, you know?”

In their adult lives, sport continued to bond some working women with colleagues and students. Alicia, for example, talks about sports often with her students, some of whom are involved with sports teams at the middle school where she works. She explained, “A couple of my students do play flag football and although I’m not a *fan* I know that they *are*. That’s what they do so I’ll say, ‘Hey, how was your game?’ You know, just in talking and in building community and building relationships with them.” Moreover, after moving to a new school, Alicia joined an NFL football pool with her new colleagues. Even though she does not follow the sport, she participated “just for the camaraderie.” Her comical account of her success in the football pool demonstrates her lack of knowledge of the predicted outcomes of the games, yet she (correctly) thought that this would be a good opportunity to get to know her new peers:

I don’t know these people, they’re all new staff; I’m new in the building. They put it out there, sure why not. You know? And I’m *winning*. They’re gonna *know me now!*...I don’t have a clue what’s going on, it’s the luck of the draw. I just look who’s playing and say, ‘Okay, well them, what color are they?’ And I look and

say, 'They look good.' Or if there's one player on the team that I think is super cute, like Reggie Bush, I say, 'I'm going with his team.' And that's how I pick and I've been *winning*...I told them the last time I said, 'I picked them just cause I liked their colors. I think it was the Jets. Their uniforms are cute. Pfft. And they won.

Like Alicia, Patty also talked about sport as a way to bond with colleagues in the manufacturing industry. Though her present company is comprised of only her and the owner, she talks about sports frequently with clients because "it seems like a common background for most of the people in this industry...there's a comfort level or some crossover where you feel like you have kind of this bond." Patty explained that golfing plays an informal but significant role in her industry, and her knowledge of sport has strengthened the relationships with her predominantly male clients.

Patty's ability to bond with vendors or to pursue potential clients, however, has been hindered by the norms established in this male-dominated industry. On occasion, Patty's boss would go golfing with potential vendors, but she did not participate because this practice was, as she described, "strictly a boys' club." She further explained:

There were no women, ever...We used to play in a work golf tournament; it was just for charity. But one of my vendors ran it and so we played. My boss would play a couple years and I kept saying, 'I would love to do that. Oh, I would love to do that some year.' And one year he's like, 'Oh, if you want to come and play.' And so I'm like, 'Oh, awesome.'...And we did that for a few years and it was just, it was awesome. It was good for work morale. I mean, it's small but it was the only thing we've done outside of work and it was just kind of nice because we got out of work for the day and I felt like, 'hey, I'm actually included in something that's been such a male-only kind of thing.'

When asked why it took her boss so long to invite her to participate in the fundraiser despite multiple requests, Patty replied, "I think because it was such a male-only thing that I think he didn't, he doesn't like to rock the boat." She thought that perhaps if "one

of our vendors or somebody he played golf with were to say, ‘Oh, I’m bringing my assistant,’ or, ‘I’m bringing another woman from the office or something,’ then he would have said, ‘Oh, you can come too.’ But he was not about to be the trailblazer, he’s not a trailblazer that way.” While sport can serve as a bonding experience between teammates or colleagues, Patty’s story demonstrates how some male-dominated workplaces continue to exclude women from involvement in sport. Her background in sport, and specific knowledge of golf, aided in her ability to break down those barriers that prevented her from participating for several years. At the time of the interview, she had signed up for a women’s golf league and was excited about continuing to improve her game.

Learning to Work Together

In addition to providing camaraderie with peers, participants also said that high school sport taught them cooperation and teamwork. Through practices and shared experiences, sport creates a collective community where participants learn a shared language and communicate with one another, and learn to work together to accomplish a goal (Mc Laughlin 2009). For some, the importance of teamwork was instilled by coaches. Veronica explained that her coach “was very adamant about playing as a team and not having single superstars, I mean it was just his kind of coaching philosophy.” By forcing team members to work together in order to accomplish a goal, participants learn how to interact with peers in ways that may not be emphasized in the classroom. Patty credits *team* sport participation with instilling self-confidence and helping her to be more outgoing. She explained, “I had super bad confidence like all growing up and I was super

shy. And I think that's why the team sports were really good for me because it forces you to always interact. Otherwise I probably would have just been more huddled in a corner by myself afraid to approach people and stuff. It helped draw me out of my shell.”

Patty's comments about the benefits of team sport participation may explain why the effects of team sports in my quantitative models were much stronger than individual sport participation for young adult labor force participation, logged biweekly earnings, and combined annual household income. Felicia also explicitly links her experiences in team sports during high school and youth sports to her young adult career, explaining:

Playing a sport where you have to be a team member is probably a really good experience for maybe not 100 percent of jobs in this day and age but probably jobs going forward cause you just with the way the world works these days, you have to kind of be collaborative, and you have to be able to depend on people to do their job a little bit, right? And you can't micromanage, like if you're on the volleyball team or basketball court, you can't micromanage how they're dribbling the ball. So you just have to let that go and be like, they're going to do it that way and I think if a lot more people had that orientation that a lot of work life would be happier and go better.

As Felicia explained, team sports force participants to cooperate and trust that their teammates, or colleagues, can and will perform the tasks required to accomplish a goal. Being patient and flexible with co-workers, so long as they perform their assigned duties, led to a more supportive and satisfying work environment for Felicia.

In addition to teaching cooperation and teamwork more generally, high school sport also exposed participants to youth, and sometimes adult, coaches or participants in community-organized sports, of different races, socioeconomic backgrounds, and other diverse characteristics. Describing her experience on her high school track team, Mary explained:

We would all stretch out together, and so that was a time when you were surrounded by maybe different people...of different socioeconomic groups, people with different ethnicities, and it's like totally equalizing...It wasn't until we had this kind of equalizing force of this sports connection that I would be going and hanging out with them.

Mary attended a diverse inner city high school, but it was sport more than other school-organized activities where she was best able to bond with peers from diverse backgrounds. Veronica explained that the diversity described by Mary was not universal to all sports teams, adding "The basketball group was definitely a lot more intercultural, interracial...it was very heterogeneous. Volleyball wasn't as much, it was pretty white. And the courses I was taking were pretty white as well. So basketball kind of introduced me to social groups that *I don't know that I would have otherwise organically fallen in with* (emphasis added)." Veronica's experience highlights the power of some sports more than others in creating a "level playing field" for youth from diverse backgrounds. Though critical race scholars argue that the colorblindness rhetoric that accompanies sport often ignores institutional racism experienced by black players, as well as the absence of other minority groups in many sports, some interviewees credit sport with at least creating an interracial environment for youth to work together.

Felicia further explained this point, relating sport participation to what she described as her "strong internal sense of justice."

I find it as a leveling playing field...In the adaptive aquatics classes I took, if you have these differing physical abilities that on land are these huge sorts of things for you to get over, like you're missing a limb or you just can't move. The water takes all that away; you can float, you can propel yourself in ways you can't normally do...Being in the water and swimming...especially for people of different abilities, really brings it back to, you know, *now* let's race.

In this specific sport, the buoyancy of the water allows individuals who are physically impaired to move their bodies in ways that the land does not allow. Though this is arguably not true of all sports, the recent media attention given to South African runner Oscar Pistorius, the first double amputee to compete in the Olympic games against able-bodied runners (Sokolove 2012), reveals the power of sport in shifting dialogue and assumptions regarding disabilities.

Alicia, an African American woman, similarly developed a meritocratic attitude as a result of her experiences as a high school cheerleader. Some of the upperclassmen on her team were slow to welcome a freshman onto the varsity squad. She remembers having to stick up for herself because of her age and status, explaining, “I was a young buck; I was fresh meat; I was a freshman coming in and I get to do varsity stuff, you know?” After overcoming that difficult experience by proving herself to her teammates, Alicia believed in a just world where people get what they deserve. She explained, “You’re going to get the position that you’re best suited for, regardless of your age or your gender, your size, any of those things.” Alicia related this experience to her work life as well, saying that she feels fortunate to work at a school where the teachers are treated equally.

By working together with teammates from different social backgrounds, high school sport participation may help prepare youth for diverse workplaces in young adulthood and throughout the life course.⁴¹ Jessica has worked at the same workplace since graduating from college, starting as a supervisor and working her way up the

⁴¹ See Chapter 1 for a more detailed review of how the teamwork and self-sacrifice learned through sport is associated with young adult work.

organizational hierarchy to more advanced authority positions. She told me that her organizational training emphasizes teamwork: “A big thing the company’s always said...[is] for your staff to be team players that you need to be a team player yourself.” She explains the importance of being able to work effectively with colleagues with differing personalities, regardless of their background or identities:

Every account that I’ve worked at, the clients are so different. I’ve had clients that complain, complain, complain about everything, or someone comes to them and says something and they’re in your office, they’re trying to get ahold of you right away like every single day. I had one client years ago that, if the vending machines had one fingerprint on them, she’d be like, ‘you need to call the [Company] vending and tell them they need to get out here, there’s fingerprints,’ or, ‘there’s a crumb at bottom of the machine.’ It’s like, oh my gosh, like, a million things to do and you’re picking apart a fingerprint. And then I’ve had other clients at that same account that were very, just didn’t have issues or problems and they just, they appreciated me telling them things that were going on and they weren’t in my face all the time and I wasn’t in theirs. This account, the three guys that I deal with are, they’re very sweet, they’re very family-oriented, they’re just always asking me about my daughter. I’ve had other clients that, even before I had kids, you never ask anything personal, they were very closed off in that area. A lot of it was just learning, kind of, as I move from account to account. So I don’t think college can prepare you for the different personalities.

The above experiences illustrate how the cooperation and teamwork instilled in sport directly relate to young adults’ ability to work effectively with diverse colleagues. For Veronica, her work performance benefited from recognizing “that I am one of many” and that her work is “not just, it’s all about me.” Moreover, she also learned the importance of identifying and validating her own and others’ strengths and contributions to a larger team, saying “Working with others, that helped me recognize how important it is not to get wrapped up in my own performance and to...be aware of what others can bring to the

table to maybe make up of some of my weaknesses and recognizing that I have strengths that they don't have.”

When asked whether she wished that she continued playing basketball or volleyball in her current life, Veronica told me that she did not miss team sport participation because her academic work environment—serving on committees or working collaboratively with colleagues—serves a similar function. She continues to push herself to “be the kind of leader that at least my coach identified in me in high school” at her job, adding, “Sometimes I do think about that analogy when I’m in meetings...and kind of applying those skills...to that environment.” Similarly, Felicia said that she swam faster when she was part of a team relay than when she competed alone. Applying this to her current life, she said that she continues to “try my hardest to be a good team member and to contribute.” She discussed importance of collaborative work in her job, and how collaboration can be instrumental to workplace success:

That’s still sort of my orientation through everything, you know, through my jobs, through everything is, I like collaborative work. I like my own thing, but then I like when I can contribute my own thing to that greater sense of purpose...If I can come in as a subject matter expert, that part I love, which is very much like a 4x4. I’m the butterfly, this is my expertise where I’ll continue to our great team.

The data presented in this section suggest that the socialization of teamwork may be one possible mechanism through which high school sport is associated with career success. Sport teaches participants to work together in order to accomplish a shared goal, and many of my interviewees felt that their work performance benefited from acknowledging and embracing their colleagues’ strengths and contributions to a work team. The importance of collaboration is especially emphasized in team sports, which

may help to explain why team sport participation is more strongly associated with young adult earnings than individual sport participation. As Felicia illustrates in the quote above, however, team work is also an element of swimming and other individual sports during team medleys or when athletes' performances are used to calculate a total team score.

This section paints a somewhat idealized view of cooperation in high school sports. Yet sports advocates also credit sports with socializing competition, a seemingly contradictory value. Does high school sport participation prepare women for more competitive workplaces? Are they more likely to embrace competition with colleagues or competitors than women who do not participate in sports? In the following section, I explore another potential mechanism linking sport and work: competition and striving for success. It should be noted that many interviewees asserted that both cooperation and competition were learned through sport, though instances where these two values conflicted, in either sport or work, were not discussed.

Success and Failure

In sport, participants experience both success and failure. Accomplishing a goal—whether it is self-improvement or beating an opponent—requires hard work and persistence. Alicia, for example, describes track and field as “serious business. You’re out here to win...It is very competitive, *very* competitive. And if you slack off, you know someone else is gonna be *right* there...coming for your spot. If you took first place in the 200 [meter run], you know well they were only a second or right behind you.” Alicia

describes having to work hard to stay ahead of her own teammates who were competing for her position. Similarly, Patty told a story where she was not only competing against her teammates for a starting position, but also her own sister:

My one sister, she's a year and half younger than me, but she played volleyball and basketball with me...[I]t made it even more competitive for me because it was my younger sister and we were on the same team for several years. So not only am I competing against the other people on my team or, you know, on the bench for a starting position but now all the sudden, once my sister got on the team, then I'm competing directly with my younger sister. So then I really wanted to be better than my younger sister. I didn't want to be showed up by a younger sister! Which is not the end of the world, but still it was just like an extra competitive portion of it. So there was a few times that my one coach, she was my coach for basketball and softball, and she didn't feel like I was playing to my abilities, or wasn't trying my hardest and she specifically started my sister in my spot which *just* I was just like, 'Oh my gosh.' And I was mad, and I was hurt, and so I went and talked to her and I was like, 'What's going on?' And she just laughed! And she was like, 'You know why I did that, right?' I'm like, 'No.' She said, 'I knew it would fire you up and I knew you'd play better the next game.' And I did. The next game was my best game *ever*.

Sarah enjoyed both softball and karate during high school, but had vastly different experiences in each sport. She told me, "Softball it's just kind of like you win or you lose, you know? But yet I liked the competitiveness of softball which you didn't really get in karate." In contrast, she explained that in the traditional Japanese form of karate "it's more about perfecting yourself than it is about competing with others." Though her dojo competed in some tournaments, her sensei "didn't really emphasize tournaments as much as...perfecting your form." Felicia similarly focused on improving her own swim times, rather than beating an opponent. She explains:

I am, in some ways, a seriously competitive person. When I'm just swimming by myself sometimes and there's other people in the pool, like that old lady has no idea that I've just smoked her like seven times. So I'm sort of making up games in my head. But when it comes to actually racing somebody, I don't find any purpose in racing against somebody. I find purpose in racing against myself. How

can I be better? So the fact that I dropped ten seconds off my time would make me happier than if I beat the person next to me but gained two seconds [on] my time.

Felicia continues to swim and competes in triathlons, which combines swimming, cycling, and running in a single race. Again, Felicia is less concerned with winning as she is with self-improvement, saying, “What I really care about is how did I improve, you know? Did I run faster, did I, was I less exhausted when I finished, you know? Those types, you know, was I less freaked out by the giant weeds in the lake.”

Sarah, Felicia, and several other sport participants spoke of the sense of accomplishment that accompanies success. Despite the differences between karate and softball, Sarah felt a sense of achievement in both sports. With softball, she described the “good feeling you get” when you “turn and do a double-play...[or] throw the ball to first and get them out or whatever. I mean, there is just that good feeling of you accomplished that...With karate there was always this reward of when you got your next belt...it was always this, you know, really sense of accomplishment.” Felicia said that swimming was her favorite sport because “actually learning to swim was a huge challenge for me as a child. I flunked beginners eight times before I passed...I felt really accomplished because it was something I had struggled with for such a long time and now it’s something that comes fairly naturally and easy to me but it took me a long time to get there.” Moreover, Felicia also spoke of the self-esteem boost that she earned through her middle school volleyball team’s success. She explained:

One year, seventh grade maybe, my volleyball team did win the city-wide conference. So that was exciting for me because if your team won a conference...they made a big felt banner for you and it went up in the gym...We also had chapel in the gym, so [I would] just sit there during chapel and be like,

‘Hmm, there’s my name,’ and think about volleyball and other things besides I was going to hell and I was a sinner and whatever else they were telling me.

With success also comes failure, and some respondents equally learned from situations in which they did not achieve their goal. As Patty explained in the opening quote of the chapter, sport provides many opportunities to succeed or fail, and the “next game could be totally different.” Felicia explicitly explained how this connects to the work world: “So you lost, now what?...And if they’ve never failed at something before, never had that failure experience, and also how your coach or your fellow teammates process that, right? Was it the end of the world? Did you get yelled at? Did they talk about how you could do it better next time, you know?”

Sport fostered a competitive drive for success or self-improvement that carried over to many interviewees’ young adult work lives. Sarah’s competitive drive spilled over to her work as a police detective. She explained, “I can’t deny that I want to get these guys to confess...and it’s kind of like a mind game. I mean, maybe that sounds bad but really that’s what it is. I’m trying to figure out which angle am I going to go here in this interview, and then as soon as I get them to admit what I need them to admit it’s like...‘Yeah! I got it.’” Sarah did not recognize very much competition between officers in her department. Though some officers “are very competitive about how many tags [traffic citations] they get each year,” she said that it was mostly men: “I don’t notice women bragging about how many tags they get.”

Patty expressed a similar feeling about her job. Although it was stressful at times, she enjoys her job on occasions when “I’ve just solved massive problems that no one else is figuring out and I’m just like, ‘Yeah!’ It’s kind of like sports, you get that winning

rush.” Patty further explained that it is important to be competitive at her job as a manufacturer representative because “We’re battling to get programs into these companies...against a whole lot of competitors that have various similar items, similar everything and we have to try to figure out how can we differentiate ourselves. So we have to be competitive and we have to try to separate ourselves from the pack.”

This drive for success may also be the inspiration for many women’s desires to advance up organizational ranks. For example, when Patty was younger, her goal was to “be the CEO of a *major* company...because, like looking at job descriptions and stuff in high school, I know I was looking at money, and looking at the bottom line, cause CEOs and how much they made and that was kind of my focus, is I want to do that, I want to be in charge and make lots of money.” Though she admits that her priorities have shifted somewhat, she still aspires for more than her current position:

I hope I have something else to go to. I started off more as fully an assistant, like preparing presentations and I wasn’t as involved. So I’ve become a lot more involved in, like I said, taking on way more responsibility over the years. But sometimes because of the certain people that will go to my boss for stuff, I still feel like they view me just strictly as an assistant. I start to feel like, sometimes like, okay they don’t think of me as much more than like a glorified secretary or something. And it’s definitely far more than that. So sometimes I think, oh, I just want to do something where I’m...my own boss, so it’ll be my own company or figuring out something else that I can start where I don’t feel like I’m under that shadow of somebody else.

Though most of my interviewees agreed that their sport experience taught them to be more competitive, not all utilized this skill in the workplace. In particular, my interviewees rarely spoke about direct competition with colleagues. Perhaps they consciously avoided competition with others in order to proscribe to mainstream gender norms and avoid facing ridicule by others (West and Zimmerman 2002). Perhaps

interviewees were unwilling to paint themselves in what they perceived to be an unfavorable light during the interview for fear of negative judgment. Speaking more generally about her profession rather than her own experience, Sarah even felt that competitiveness is “not a trait that’s really accepted really in the elementary school. It tends not to be a very competitive environment...I don’t think that that’s a characteristic that I would think of when it comes to teaching.” When contrasting her current job as a grant manager at a large Midwestern University with her past sales positions, Felicia explained that competitiveness would be counterproductive:

I would say that definitely I adapt and am a bit of a different person. Especially like let’s say sales, like just the type of people who are attracted to sales and then they’re all male. They’re a lot more forceful and competitive and my job now I really have to dial those traits back a *lot* or they just freak out. But those were the things that allowed me to be successful in that environment...That is *not* the way the majority of my [current] office operates and they view it as antagonistic, as non-collegial and threatening and I would get *nothing* done, *nothing* done...If I did *any* of those things in my job, I can’t tell you the amount of like, it would, I think I would, like they couldn’t fire-, it takes a lot to get fired at the U, but I would just have *no* relationship with *anybody*. But in that, sales, if I didn’t have a strong position, if I didn’t like at least *try*, you know, they lost respect for me (original emphasis).

As the latter part of the quote above demonstrates, Felicia felt that competitiveness would not be accepted at her current position, though she struggles to articulate what specific repercussions she may experience. In the male-dominated sales jobs where she worked prior, however, her colleagues would have “lost respect for me” if she did not conform to their “forceful and competitive” behavior. Felicia’s experience illustrates how sport may prepare girls for work in certain job types or roles, but the “masculine” traits learned through sport are not welcome in all work settings, particularly among women. Though Felicia felt that she needed to take a “strong position” to maintain the respect of her

colleagues while doing sales work, research also shows that women who behave aggressively or embrace competition across a range of fields are often labeled as unfeminine or as a lesbian (e.g., Pierce 1995). I will return to a discussion of the barriers facing working women later in this chapter.

Further research is needed to better understand whether high school sport fosters greater competition among participants in other domains, and how gender norms influence this relationship. This study could be extended to include a comparison with male sport participants and/or girls and boys who did not participate in high school sports. Moreover, extensions of this research should include greater variation across specific sport contexts (e.g., competitive and non-competitive teams, masculine- or feminine-typed sports, etc.).

Withdrawal from Competition

It is important to note that not all respondents embraced the competitive aspect of sports. As discussed above, many respondents enjoyed the camaraderie they were able to develop with their teammates, but a few women did not enjoy the pressure attached to competition. Amanda, for example, enjoyed playing tennis because, as a participant in a “country club sport” in an “inner-city school,” it “took a lot of pressure out of being competitive, I think. It was just more fun.” Becky juxtaposed her experience on a community-organized ice hockey team against the experience of her son, saying:

The coaches were real nice, we had lady coaches. There wasn't any checking so nobody ever got hurt. It was really kind of a friendly... For me it was just to have fun. Because now my son plays and he's very, he gets upset when they don't win and, you know, he's telling me, 'Well, I gotta try harder, I gotta get in the corners,

I gotta get this, I gotta do that.’ And I’m like, ‘No, no, no. You just have to [have] fun.’ I used to play defense and me and the girl I play defense with, we would *sing*, you know, a song, whatever song was on the radio we would start singing it really loud with our mouth guards in. ‘Ar ar ar ar ar,’ you can’t hear it, but we’d just have a good time. And he’s, boys’ hockey is not about having a good time, it’s about winning and the coach yelling at you from the bench, and it’s not like, my son’s hockey is not like that, mine was fun.

While many respondents viewed competition as fun, Becky saw these concepts as mutually exclusive. Overall, the women I spoke to viewed their informal sport participation as less competitive. As Veronica explained, “There was pressure in the volleyball games for school to win, right, and that made me anxious. But the volleyball games for church were all just pure rec[reation]-related and just a lot of fun...it was just really loopy goopy and fun.” Indeed, my quantitative results suggest that the effect of formal sport participation during high school has stronger and more robust effects on work outcomes, suggesting that this concept is a key link between sport and work.

Mary was surprised by how “vicious” the practices were when she rowed crew during her freshman year of college. She quickly quit the team, explaining that the work required for the sport was not worth the payoff:

I’d been on the track team. I’d been running for a long time and they would make us run until basically people threw up and obviously run to the point of multiple stress fractures and stuff like that...I was really surprised and dismayed by that because, who cares? I mean, if you’re really good, you can practice all you want. You don’t need to push yourself that hard. That’s just unnecessary. And I mean the practices start at 4:30 in the morning. I’ll get up at 4:30, I mean, it’s gonna be ugly but I’ll still do it. But I’m not barfing for you.

Another reason for Mary’s reluctance to participate competitively was the pressure she felt to perform. Speaking of her time spent on the track team, she told me that she found the track meets to be “kind of boring, to be honest. I mean there was a lot

of pressure to perform and that's good because you probably perform better, but that just meant that people were a little bit more stressed out...I was not into the competition aspect of it at all." Like Mary, Veronica also remembered feeling "very anxious" as a result of this pressure to perform well during each of her high school sports. She enjoyed practices, but said this of her basketball games:

When you're in a live game environment like that, that's what everyone's rooting for and that's what the public then brings to the game, too, so you get that added pressure. That's the other thing that felt strange about it because in the practices it's just like my family, you had this little community and stuff and then these strangers come in and are weighing in on us and they don't know us really...It was just so much more pressure on the game that just made it not fun.

Veronica expressed similar feelings about running hurdles during track and field:

I was really bad at it. It was not, that was not fun...I remember the coach just being really confused like looking at me like, 'You're tall and you have these long legs, *why* can't you clear these hurdles? What is the problem?' Like he just kept trying and trying and eventually I just gave up...[M]aybe it was kind of what happened in the basketball games, that kind of fear of not performing well and it would just compromise my ability to [perform]...That was something concrete, like there was this physical obstacle that would fall over if I didn't do it right.

After quitting sports midway through high school, she stopped spending time with her sports friends and "fell in more with the kind of artsy, like pseudo-intellectual crowd."

She felt in awe of her boyfriend at the time because he was "able to kind of navigate *both* worlds. And I was really kind of in awe of that because I didn't feel like I could do that at the same time, but he was able to." When asked why she felt that she was not as successful at maintaining both groups of friends, she replied, "If I'm being honest, maybe I just wanted nothing more to do with that pressure that I felt in that sport world. I think I was just done with it."

Unlike Becky, Mary, and Veronica, the other women I interviewed had positive sport experiences. Though they may have shared isolated negative experiences—such as Patty’s inexperienced volleyball coach during her senior year of high school—their overall outlook regarding sport participation remained positive. Moreover, most continue to participate in a number of sports and spoke of the importance of sport and physical activity in their adult lives. Becky and Mary, however, reported very little current interest in sport. As an exception, Veronica continues to run and participates in road races, such as half marathons, to vary her training regime because she “started getting a little bored just doing the same thing over and over again.” Despite participating in a number of different sports during high school, she said, “I was really doing the sports...to try something new, learn a little bit about a game, emphasis on a little bit. But then to hang out with people, and I can hang out with people now whenever I want, so I don’t need to use sport to get those things.” Some of her past workplaces have organized a company golf or softball team, but Mary did not care to participate: “If the whole point of going there is to go and have fun then why do I want to, I would just rather go out and have fun. You know, like talk with people. I can do so much more talking across a coffee shop table than I can when you’re [holds hand up to mouth to signal yelling], ‘maybe you’re at second base and I’m stuck over here at first.’”

Similarly, Becky reported no current interest in sport participation. She explained:

Some ladies join, you know, [a] softball league or something. That’s not me...My cousin asked me, ‘You want to come to,’ she’s in a kickball league. They keep their beer in like these little bar stand s out in the, on the field it’s like a stick with like a flower you put your beer in it, then you can be out in right field and have a beer and play kickball like on a Tuesday night or something. So no, it’s not for

me. So even something fun like that, nah, I don't think so. I gotta take care of my son, I gotta cook dinner, I gotta keep the house clean. No, I don't think I got time for that.

It is perhaps telling that Becky also expressed little interest in career advancement. She currently does much of her work remotely, and she did not understand why one of her colleagues opted not to take advantage of the opportunity. She exclaimed, "Are you kidding? You could sit home in your pajamas! And if it's snowing outside you don't have to leave your house. Why would you go into the office?" Though her company has told her, "keep in mind we can get you a management position," Becky expressed some reservations about the opportunity: "I'm thinking in my head, I don't want to come into the office five days a week. I don't know that I would want to do that, which is bad. Because then I'm sort of topped in my career. But it's really tempting."

Trouble at Work

The lack of competitive drive coupled with the desire to "do what makes you happy" may lead women like Becky to forego advancement opportunities or to pursue less economically rewarding jobs. As Mary said of a past job working on a political campaign, her line of work requires "certainly a willingness to work long and hard." But this is not meant to be a critique of these women's choices. Cultural feminists argue that rather than aspire to be more like men, qualities and values associated with femininity should be given equal value as those associated with masculinity. Sacrificing money and responsibility may be an easy choice in favor of flexible work hours or arrangements, health insurance and other employee benefits, or a profession that one is passionate

about. As Felicia explained in weighing her future job options after her temporary position ends, “In my next, the places I’m looking, it’ll be a product or service that to me has a lot of meaning. So what doesn’t have meaning to me is thinking up like the 78th flavor of Yoplait yogurt, does not have meaning.”

Several of the women I interviewed held high paying jobs in male-dominated industries, and they spoke of the challenges of working in their field. Sarah’s work as a police officer perhaps best encapsulates this shared experience. Sarah explains:

I was 22 when I got hired. I was 19 when I started with the police department parking enforcement and I was done with my two year law enforcement degree when I was 19. So I was young, naïve, no world experience really, other than growing up in the inner city I had no world experience outside of that. I thought it was going to be fun...I had no clue how hard it was going to be being a female in a male-dominated profession. I had no clue. I was 19, you know? It’s not like anyone said, ‘Hey, by the way, do you realize you’re going into a male-dominated profession? It might be kind of challenging.’ I mean, I just was like, ‘oh, whatever.’ If I could change my profession like *that* I would do it, you know, I would do something different. But I can’t obviously, this is my degree path. I mean, I have a sociology degree now but obviously with how I’m invested in my pension and everything else it wouldn’t make sense for me to go anywhere else or do anything else.

Sarah feels somewhat trapped in her chosen career because of the pension she has accumulated after seventeen years on the force. When asked what was difficult about working as a female in a male-dominated profession, she explained:

It started from day one, working patrol. I mean, I’d be the only female sitting at roll call and there would be the sexist jokes or people would make just crude comments to me, you know, and just, I was 22 and these guys are in their 30s saying stupid stuff. And then, even in this day me and my fellow female sergeants we talk about how we have to work hard to prove ourselves every single day, every single day. It doesn’t matter how much someone respects you, it doesn’t matter how much you may have handled someone last week, I mean, every single day. And the minute you don’t do your job or the minute you make a little mistake or something it’s like everything else is wiped away. It doesn’t matter how good of a job you did, and it’s not fair but it’s just reality. And then, too,

even to this day I just feel like stupid comments, jokes, all that stuff... Some of the fellow investigators, they'd be raunchy, they'd be talking about their cases, I'd just be like, 'shut up.' I mean, I didn't say that, but that's what I'd be thinking. But it's just the environment. And I can't change it. I mean there's nothing I can do to change it. Even if I tried to call those guys out on it, it would just come back on me there's nothing I can do to change them.

Sadly, Sarah is not alone in her description of male-dominated industries. In another mixed-methods study of the YDS, McLaughlin, Uggen, and Blackstone (2012) find that other women similarly face sex discrimination and harassment, and have to prove themselves to their male colleagues on a regular basis. Moreover, the likelihood of experiencing sexual harassment is greater for females working in male-dominated industries and among female supervisors. Though Sarah had always aspired to hold a high-level authority position in the police force, she recently was unsure whether such a position was worth the cost.

I feel like in order to become a [high-level supervisor], what I've seen in the last couple years, you almost have to sell your soul to our department and I don't like that. I mean, everybody becomes a yes man and there's this pressure... [T]hey called him up today at two [o'clock] and said, 'You have a meeting today at three that you have to be at.'... I work 'til three, what if that would have been me?... [N]ormally I have to be home by four to get my son off the bus. And as a sergeant I have a little more say in my schedule and my hours and stuff whereas [as a high-level supervisor] you are a company man, you work whatever hours they ask you, and there's very little respect for you as a person... [My colleague] makes jokes about they had a lobotomy, but it's true... If you want to be someone who is going to break the mold, you would be the outsider, and you would have an uphill battle. And you'd have to really want to fight it. And the thing is, I don't have the energy. You know, I'm pregnant again, I got two little boys. I just want to go to work, do my job, get paid, go home. You know? And do my job *well*, I'm not saying that like I just want to put in my eight hours. I want to do my job well but my family comes first.

Concern over work-family balance was a common theme among the women I spoke with, especially mothers of young children. The prevalence and costs of work-

family conflict have been well-documented in sociological literature, with research suggesting that women are more affected than men (e.g., Becker and Moen 1999; Jacobs and Gerson 2004; Schieman, Milkie, and Glavin 2009; Stone 2007). While initiatives that increase employees' schedule control significantly decrease work-family conflict (Kelly, Moen, and Tranby 2011; Lyness, Gornick, Stone, and Grotto 2012), workplaces have been slow to adapt such policies or institute widespread change.

The workplace issues experienced by some interviewees suggests that youth sport participation, while offering some career advantages, does not protect women from gender discrimination, sexual harassment, work-family conflict, and other issues affecting women in the labor force. Though sport may provide some of the skills or values required for working in a male-dominated industry, obtaining a high earning position, or holding supervisory authority over other workers, efforts to improve working conditions for women are essential for achieving workplace equality. As Sarah says above, *"I had no clue how hard it was going to be being a female in a male-dominated profession...If I could change my profession like that I would do it (emphasis added)."* Her love of law enforcement and detective work has weakened as a result of sexist and discriminatory interactions with her predominantly male colleagues. Moreover, she no longer aspires to achieve a high-level supervisory position as a result of the inflexible time demands and having to "sell your soul." While at first glance Sarah's experience appears to be a story of success and perseverance, her feelings of being trapped in her chosen career path and having to prove herself every single day is all too familiar for women working in masculine or male-dominated industries. Without institutional change,

women in these positions may leave their jobs—or the workforce entirely—in an effort to escape patriarchal working conditions.

Discussion

For better or worse, my interviews suggest that high school sport may shape participants' values and identities. A couple of the women I interviewed felt that the commitment and training requirements were not worth the sacrifice, quitting to focus on academics or other realms of high school or college life. The majority, however, learned lessons from sport culture that may partially account for the statistically significant relationship between high school sport participation and young adult work. I do not offer an exhaustive list of all lessons learned through sport, but instead focus solely on recurring themes that interviewees are able to recall twenty years after their high school sport participation. It is likely that sport culture affects participants in other ways that they are not able to fully articulate or remember. Still, these data can generate theories to explain the relationships observed in the YDS survey data. Future research should explore whether the following three lessons or values learned in sport translate to work or other domains: (1) the ability to communicate and collaborate with individuals from diverse backgrounds; (2) a willingness to continuously learn and improve; and, (3) the competitive drive to succeed and ambition to advance.

The interview data also show the importance of sport context in determining the meaning of sport in participants' lives. For example, women described formal participation as much more competitive, with a greater focus on winning games as

compared to having fun. The high participation rate among girls in post-Title IX times translates to higher levels of competition both within and between teams. These data suggest that the hard work and persistence required to maintain a starting position or to win games may carry over to women's work lives. Similarly, participants were more likely to stress the importance of working together collaboratively in order to accomplish a shared goal when discussing team sports as compared to individual sports. As Felicia explained, this skill is highly valued in workplaces where “*you have to kind of be collaborative, and you have to be able to depend on people to do their job* (emphasis added).”

As the preceding section suggests, the socialization that occurs in high school sport is unlikely to be a quick fix for gender inequality in adult work. Women in the labor force, and especially women who work in male-dominated fields or hold supervisory authority (see McLaughlin, Uggen, and Blackstone 2012), often face unequal treatment. Women are more likely to experience gender discrimination and sexual harassment (Uggen and Blackstone 2004), are less likely to hold positions of power (Elliott and Smith 2004; Kalev 2009; Reskin and McBrier 2000), and are disproportionately concentrated in feminized and less prestigious occupations (Charles and Grusky 2004). Though it is important to understand the effects of high school sport participation and other formative experiences during adolescence on socioeconomic attainment, we must also continue working to reduce gender inequality in organizational structures at work.

CHAPTER 7: CONCLUSION AND FUTURE RESEARCH PLANS

Taken together, this study finds that high school sport has a lasting impact in adolescents' lives. In Chapter 4, I find that sport participants are more likely to be employed throughout young adulthood. This effect holds net of strong statistical controls for socioeconomic background, educational attainment, and young adult family characteristics. In this empirical chapter, I also consider how the effects of high school sport may vary depending on participants' sex and the type of sport participation. Specifically, I examine whether relationships between sport and work outcomes differ for participants in formally and informally organized sports, team and individual sports, and contact and non-contact sports. I find that formal sport participants and adolescents who play team sports and non-contact sports are most likely to work, net of stable and time-varying characteristics. Though sport participation is not associated with the industry sex ratio of males' primary jobs, females who participate in contact sports are more likely to work in jobs characterized by a higher proportion of males.

In Chapter 5, I examine whether high school sport participation is associated with young adult attainment. Both males and females who participate in sports report higher earnings than their peers. This relationship is due, in part, to participants' greater educational attainment: sport participants are more likely to enroll and graduate from college, which translates to greater earnings throughout young adulthood. The relationship between sport and earnings is particularly strong for participants in school-sponsored varsity or junior varsity sports. Moreover, males who participate in team sports and contact sports report higher earnings, and this relationship remains statistically

significant above and beyond educational attainment. The latter finding suggests that the sport culture fostered in these specific contexts, among males, contributes to greater socioeconomic attainment above and beyond the effects of a college degree.

Building on past research on sport participation and attainment, I also measure the effects of high school sport for combined household income. While individual earnings are useful for understanding how sport directly affects participants' work lives, annual household income is a better indicator of the total resources available at the family unit. Here, female sport participants, but not males, report an advantage during young adulthood. Exploring sport context, I find a higher household income among females who participate in school-sponsored varsity or junior varsity sports, team sports, and non-contact sports. Lastly, I find that female sport participants, particularly those who participate in varsity or junior varsity sports and non-contact sports, are more likely to hold supervisory authority. These findings suggest that focusing on individual earnings, alone, masks the significance of high school sport for females' attainment. A recent survey by the accounting firm Ernst & Young finds that sport participation is associated with women's advancement to high level business executive, or C-suite, positions (Glass 2013). The study finds that 96 percent of C-suite women had participated in school-sponsored sports at either the primary, secondary, or collegiate level. Moreover, other studies have explored the population-level effects of the changes in female sport participation rates resulting from Title IX. Using state-level data, Stevenson (2010) finds that the 30 percent rise in females' sport participation from 1971 to 1978 resulted in a .12

year rise in educational attainment and a 4.5 percent increase in female's labor force participation.

My in-depth interview data, introduced in Chapter 6, identify how sport participation may benefit youth during young adult work. Many interviewees said that high school sport improved their ability to communicate and work cooperatively with others, increased their desire to continue learning and improving in all facets of life, and instilled a competitive drive within participants.

This mixed methods project, which combines longitudinal survey data from the Youth Development Study with in-depth interviews, provides important new insight into the connections between gendered institutions across the life course. Though a number of caveats must be explained before discussing the implications of my findings, this study offers the strongest evidence to date on the long-term effects of high school sport participation on young adults' careers.

Strengths and Weaknesses of this Study

As discussed in greater detail in Chapter 2, the Youth Development Study began in 1988 with a sample of high school freshmen in the St. Paul, Minnesota public school system. As a result, future research is needed to test whether results vary for (1) students in rural or suburban areas, or who live in other regions of the country; (2) youth who attend private schools, religious institutions, or are homeschooled; and, (3) youth who attend high school and participate in sports during other periods of time.

At the same time, these limitations also help isolate the effects of high school sport on young adult work outcomes. Because all respondents are roughly the same age, and many continue to reside in the Twin Cities metropolitan area, they are establishing their careers within the same economic or political climate and experience the same unemployment rate and other local labor market structures. Though allocation of resources and opportunities to participate in sports undoubtedly vary across school districts, this analysis builds on past research by explicating the long-term significance of sport in adolescents' lives in the post-Title IX context. As girls' and women's sport and labor force participation become increasingly common and accepted, and their experiences within these gendered institutions increasingly resembles that of boys' and men's, I would expect gender differences in work outcomes to decline.

In an attempt to explain the significance of, and connections between, gendered institutions across the life course, this study focuses exclusively on sport and work. Future research should also examine connections between other gendered institutions or adolescent activities. Understanding the long-term effects of other extracurricular or after-school activities, such as student council, yearbook, or debate team, will shed light on whether the effects observed in this analysis are unique to sport. Unfortunately, these data are limited in their ability to compare sport with other extra-curricular activities, and a larger, more representative sample is needed to test whether participation in more competitive and exclusionary collegiate sports further amplifies these findings. Similarly, some adolescents may informally participate in sports throughout young adulthood, particularly through community-organized teams and leagues. My interviews with a

subset of women who participated in high school sports suggest that sport continues to be an important aspect of their daily or weekly routines. The collection of longitudinal data on sport participation throughout young and middle adulthood is needed to determine whether lifelong sport participation has any measurable long-term effects on work or other outcomes.

Despite these limitations, this study provides strong empirical evidence on the value of youth sports. In particular, this research is attentive to how sex and sport context, issues that are often overlooked in past research and discourse on the topic, shape long-term outcomes of sport. For example, a simple, bivariate analysis would show no relationship between high school sport participation and the sex composition of young adults' primary job industry. Further investigation, however, reveals that females who participate in contact sports are more likely to overcome sex discrimination and other barriers and find employment in industries that are characterized by a larger proportion of male workers. Though youth sport proponents may, at times, overstate the positive relationship between sport and work, it is clear from this analysis that high school sport participants are not worse off than their peers in relation to the work outcomes explored in this study. Moreover, many of these relationships persist beyond the effects of strong demographic, high school, and young adult characteristics.

Implications for Public Policy

On the whole, my quantitative analyses suggest that the effect of informal sport participation is not as strong or robust as formal sport participation during the high school

years. In particular, respondents who participated in varsity or junior varsity sports report greater labor force participation, annual household income, logged biweekly earnings (among males), and supervisory authority (among females), while informal sport participation was not associated with these outcomes, net of background and adult characteristics. These findings suggest a difference in the culture or significance of sport between some formal and informal contexts.

Some feminist perspectives embrace the less competitive and less physical model of sport, pointing to the potential for sport subcultures to promote a feminist vision of power and to provide a safe haven for women and girls (Adams, Schmitke, and Franklin 2005; Kane 1995; Lenskyj 2003; Theberge 2000). There is much validity in the feminist critique of masculine sport culture. Documented cases of inequality and abuse of power seemingly run rampant in revenue-producing collegiate and professional sports programs. Indeed, sport contexts that do not prioritize winning over all other goals can also be associated with positive outcomes. Through my in-depth interviews, I find that informal sport participation offered some participants a proper model for how to work collaboratively with individuals from diverse backgrounds.

This alternate view of sport may offer an important alternative for participants who do not embrace the competitive sport model, but it is unlikely to permanently replace the dominant cultural form. Though future research is needed to better understand the mechanisms through which sport influences work, my quantitative results suggest that girls who participate in competitive sports are socialized to succeed in work and other masculine institutions. Women are forced to endlessly “prove themselves” in masculine-

typed occupations, and it would be a disservice to women to deny their full participation in sport—particularly highly competitive, contact sport cultures—and any other masculine institution where they are able to learn skills that will help them to navigate and combat patriarchy.

Denying women and girls the opportunity to participate in competitive sport could have long-term effects on women's attainment and independence gained through the labor force. But are girls in danger of losing access to sport, particularly more competitive or masculine contexts? Though the number of female sport participants is at an all-time high, many high schools and universities opt to cut girls' sports, often under the guise of fiscal responsibility. Most recently, Quinnipiac University was involved in a four year legal battle after members of the women's volleyball team filed a lawsuit against the institution after it announced plans to eliminate the team in favor of competitive cheerleading. The proposed addition, later renamed acrobatics and tumbling, was ruled to be not developed enough to count as a collegiate sport for the purposes of Title IX. Moreover, in 2010, a judge issued an injunction in the case after viewing evidence that Quinnipiac University had been manipulating athletic rosters to appear as though they provided more opportunities for women to participate in sports than in actuality in order to be in compliance with Title IX (Associated Press 2013).

Fifty years after the passage of Title IX, some argue that the legislation is no longer necessary. Opportunities to participate in sports have increased dramatically, but opponents argue that requiring schools to offer an equal number of roster spots harms men's sports. In 1995, Congressman J. Dennis Hastert of Illinois, a former wrestler,

called a series of hearings on Title IX, arguing that Title IX “is the only civil-rights law I know of where innocent bystanders are punished” (Suggs 2005: 129). While cutting men’s programs to achieve parity is certainly not in the spirit of the law, Title IX proponents argue that individual institutions have many other compliance options, such as adding women’s programs or reducing the size of football rosters. Suggs (2005) points out that in the 2002-03 season, the average collegiate football program contained 90 players, with 87 teams having 120 or more roster spots. It is important to combat attempts to weaken or eliminate Title IX, as well as other attacks on opportunities for girls to participate in competitive sport.

Given the cultural significance of sport, the institution has the potential to create social change in the meaning and significance of gender in American society. Sport is one of the only domains that maintains and even celebrates sex segregation and difference. As the skill level increases and sports become more competitive, however, opportunities have increased for girls and women to play alongside boys and men. Numerous examples of this trend exist at the youth or high school level, but a small number of elite professional women athletes have begun to challenge the necessity of sex segregation in sport. Some discredit such challenges to men’s stronghold over sports as publicity stunts, downplaying the significance of Danica Patrick competing on the NASCAR circuit, or NBA team owner Mark Cuban’s recent statement that he would consider drafting basketball phenomenon Brittney Griner. Still, women like Patrick and Griner challenge gendered misconceptions about the limits to women’s strength and abilities, both in sport and other masculine institutions.

The desegregation of sport is a contentious issue. Common arguments against coed competition are that girls would likely be injured if allowed to play with boys and that losing to a girl might be harmful to boys' self-esteem (Sabo 2007). Earlier this year, a twelve year old girl was reportedly told by her Christian middle school that she would no longer be allowed to play football during the following season out of fear that her presence might inspire "lustful thoughts" among her teammates (Bennett-Smith 2013). Perhaps the greatest argument against desegregation is that most sports, at least in the short term, would likely be dominated by boys, and girls may have few opportunities to participate. Still, the desegregation of sport is consistent with the goals of a larger feminist "degendering" movement that challenges the gender binary and undermines biological assumptions about men and women (Lorber 2000; 2005).

The current sex segregation in the overwhelming majority of competitive high school sport raises a number of questions about the long-term benefits of sport for girls. On the one hand, participation in a masculine culture may offer an alternative form of socialization that will better prepare girls for the norms and values of work and other gendered institutions they will participate in throughout the life course. On the other hand, girls do not compete with or against the opposite sex. As a result, sport participation may not prepare girls for the sexism, gender discrimination, or sexual harassment they may experience at work and in their adult lives more broadly. Perhaps a coed sport environment would better prepare girls for gendered institutions in young adulthood, but an environment that fosters "pro-girl philosophies", as Amanda described of her experience playing high school tennis, may be necessary to facilitate girls' sport

participation and retention where girls can develop the attributes or qualities that will prepare them for young adulthood. More research is needed to fully understand the costs and benefits of sex segregation in sport.

Future Research Plans

This research, while providing much insight for many unanswered questions about the long-term effects of high school sport participation, also raises new questions that I would like to test in my future research. First, further data collection is needed to better understand the relationships between gender, sport, and work. The YDS represents the best available existing data source for detailed questions on high school sport and longitudinal questions on work outcomes. As a check of robustness, however, I plan to rerun my quantitative analyses using a large-scale, nationally representative dataset. The National Longitudinal Study of Adolescent Health, which follows adolescents in grades 7 through 12 during the 1994-95 school year, is an ideal choice for this supplemental analysis. Moreover, the Add Health survey included questions on participation in a number of extra-curricular activities in addition to sport, which would allow me to test whether the positive effects of sport observed in this analysis are specific to sport or may be more generalizable to participation in other school-organized adolescent activities.

I would also like to conduct additional interviews with YDS participants to enrich my existing sample. This second round of data collection will include interviews with male sport participants and respondents who participated in non-sport extracurricular activities. Though my interviewees helped to illuminate how their high school sport

participation impacted their young adult work lives, this methodology is not ideal for identify and isolate the specific mechanisms that link sport and work. Using the process of triangulation, I would also like to observe high school sport culture firsthand to better understand the values and norms that are reinforced or challenged. Depending on the scale of the project, this study could involve a comparison of sport(s) viewed as masculine (e.g., ice hockey or football), sport(s) viewed as feminine (e.g., figure skating or cheerleading), and non-sport extracurricular activities (e.g., student council or yearbook) in both sex segregated and integrated contexts.

As a separate extension of this project, I would like to explore the role of physical and mental health in mediating the relationship between high school sport participation and work outcomes. Researchers have documented the physical and mental health benefits of sport, including increased physical fitness (Pate, Trost, Levin, and Dowda 2000) a reduced risk of cardiovascular disease, diabetes, and cancer (Warburton, Nicol, and Bredin 2006), increased self-esteem (Daniels and Leaper 2006; Findlay and Bowker 2009; Marsh et al. 1995), and lower odds of suicide (Sabo et al. 2005). In addition to providing opportunities for youth to stay active in light of the growing childhood obesity epidemic, high school sport has been linked to more physically active lifestyles throughout adulthood (e.g., Curtis, McTeer, and White 1999; Perkins, Jacobs, Barber, and Eccles 2004). In a longitudinal study of Flemish women, Scheerder and colleagues (2006) find that adolescent sport participation is a stronger predictor of adult involvement in sports than educational attainment or parental socioeconomic status.

The maintenance of a healthy lifestyle may allow young adults to work in any career, as compared to unhealthy adults who may be limited in their ability to work, or work in specific occupations. Moreover, given research findings that self-esteem and other measures of mental health are associated with earnings (Drago 2011; Goldsmith, Veum, and Darity 1997; Waddell 2006), better long-term health among high school sport participants may also contribute to workplace success.

Though the role of health was not considered in this dissertation study, preliminary analyses suggest that both high school sport participation and young adult labor force participation are associated with several health indicators measured during the later years of young adulthood (when most respondents are 31 or 32 years old). Sport participants *and* young adults who are employed similarly report greater perceived health, had fewer physical health problems that caused difficulty in completing work or other daily activities in the past four weeks, reported fewer emotional problems (such as feeling depressed or anxious) that inhibited work or other daily activities, and were less likely to be diagnosed with a major disease, disability, or handicap (not shown, available by request). Further investigation is needed to determine whether these relationships remain net of statistical controls for socioeconomic and other characteristics. My qualitative data, however, suggest that high school sports taught many participants about the benefits of establishing healthy behaviors, particularly exercise and proper nutrition.

In addition to health, my findings also point to the important role of family in these relationships. For example, paternal relationship was highly correlated with sport participation, particularly among girls (see Table 3.1). Sport participation was also

associated with relationship and partner work status during young adulthood. In recent years, the children of YDS respondents have also been invited to complete questionnaires, referred to as the Second Generation Study. The purpose of this project is to better understand how parents' experiences and trajectories influence their children's attitudes and behaviors. Using this data, I will examine intergenerational sport participation, particularly among mothers and daughters.

Lastly, my qualitative data highlight the centrality of competition and winning in many high school sports. While these values may lead to greater workplace success, they may also increase the likelihood that participants will engage in risk-taking or rule-breaking behaviors. The YDS offers rich longitudinal data on the prevalence of such conduct at work and in other areas of life. In future research, I will explore a range of outcomes that vary in severity, such as deceptively calling into work sick, arriving to work late or leaving early with no good reason, workplace theft, lying to an employer, been drunk or high at work, damaging property at work, hit or threatened to hit a co-worker or customer, and being fired from work; serious personal injury; being arrested or spending time in jail, shoplifting, theft, vandalism, or providing alcohol to a minor; fighting; watching x-rated or pornographic videos; alcohol and drug use; and illegal parking, failure to pay a parking ticket, vehicle accidents, driving while intoxicated, and excessive speeding. Together with extensive questions on high school sport participation and other demographic and control variables, this analysis will delve deeper into the positive and negative outcomes associated with sport culture.

Summary

This study has examined whether high school sport participation, for both boys and girls, is associated with young adult work. Using longitudinal data from the Youth Development Study, I provide empirical support for popular claims that sport participants are more likely to work, report greater socioeconomic attainment, and are concentrated in different types of jobs or work roles. As discussed in greater detail above, these relationships vary by participants' sex or the type of sport participation. Though this analysis cannot rule out all issues of selection, these relationships hold net of background characteristics, such as parental social class and grade point average, measured during the ninth grade. More research is needed to specify the mechanisms through which sport influences work, but my qualitative interviews with a subset of female YDS participants offer several theories for explaining this relationship.

Girls' and women's place in sport remains highly contested. On the one hand, many advocates struggle to protect or expand opportunities for girls to participate, and for many young girls the iconic female athlete represents power and strength. On the other hand, proponents continue to attack Title IX and attempt to preserve sport as a symbol of masculinity that excludes women and girls. My findings on the positive work outcomes associated with sport demonstrates the ability of sport, and perhaps other institutional contexts, to challenge traditional gender roles and assumptions about the natural abilities, and limitations, of women and girls.

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Methodological Appendix

CONTENTS

- Interviewee Bios.....204
- Invitation to participate in the study.....206
- Consent information sheet.....207
- Interview guide.....209

Interviewee Bios

Alicia is a married mother of two school-age children and the only non-white woman in my sample. After moving back to the Twin Cities after graduating from a historically black college in the south, she participated in a training program for inner city teachers and has been a sixth grade teacher for the past fourteen years. She was a member of the varsity cheerleading squad during all four years of high school, describing herself as *the* cheerleader, and also ran track, participating in the 100 and 200 yard dash.

Amanda is married mother of two young children. Her husband works in a high-paying corporate job, affording her the ability to work as a part-time substitute teacher at her children’s elementary school. Amanda played tennis for four years during high school, and participated in golf during her junior year after the coach offered her extra credit points in her physics class.

Becky works full-time as a coder in the health services field. She played hockey and golf in high school, and she has a high school age son who also plays sports. Becky was not very passionate about her sport experience, instead favoring her time as a cheerleader which she did not consider a sport.

Felicia is a single, child-free adult. She works full-time as a grant manager at a large Midwestern University. She worked a series of marketing, public relations, and sales jobs in the tech industry while living in San Francisco before returning to the Twin Cities metro area after her mother grew ill. During high school, Felicia played on her team’s volleyball (freshman year), badminton (sophomore year), and swim team (junior and senior year). She also swam during the summer for personal fitness.

Jessica is a high-earning supervisor in the corporate food services industry. She has a six year old daughter and is currently engaged to be married. She began working for her current company after graduating college, and has been a supervisor, working her way up

the organizational ranks, for 17 years. Jessica played basketball in ninth grade, and then swam for the next three years of high school after being unsatisfied with her experience on the basketball team. She also joined a recreational softball team with a close friend during her senior year of high school.

Mary is a stay-at-home mom who worked a series of high-paying political and public relations jobs until her son was about 2 years old. She became a mother in her early to mid-thirties, and grew up in an affluent family. Mary dabbled in a number of sports during high school, playing one season of tennis, two seasons of soccer and golf, three seasons of track and field, and was on an intramural downhill ski team at her high school.

For the past 12 years, **Patty** has worked as an account manager in the manufacturing industry at a company comprised of her and the owner. She works full-time and has no children. She was very active in sports during high school, playing varsity volleyball, basketball, and softball and participated in coed flag football, volleyball, and softball through the wider community.

Sarah has worked as a police officer for 17 years. She has two kids, age 4 and 6, and was pregnant with her third child at the time of the interview. Sarah played second base on her high school's softball team, also playing during the summers in a community-organized recreational league. In addition, she participated in karate from age thirteen until her early twenties, working her way up to a brown belt. She briefly participated in tennis and volleyball, but did not complete an entire season.

Veronica is a white married woman with no children. She works as an assistant professor in the fine arts at a private Catholic University. She ran track and field and played basketball for the first two years of high school, and played volleyball with a church-league.

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«GreetingLine»

As a participant in the Youth Development Study (YDS), you know that we have collected a great deal of information about young people and their work. We truly appreciate your participation as it has made the study such a success. Though we have learned much from the surveys, I would like to learn more about women's career trajectories and work experiences in adulthood.

My name is Heather McLaughlin, and I am a Sociology Ph.D. student at the University of Minnesota. I am conducting a research study on how gender and sport participation affect patterns of work in different occupations and industries. As part of this study, I will be interviewing a small number of people who have been participating in the Youth Development Study. You are invited to be interviewed for this study, and **you will be given \$50 for your time and participation**. If you are interested, I will also send you a brief report of findings upon completion of this study.

If you agree to be interviewed, the interview will last 60-90 minutes and will be done at a place and time of your choosing. You will be asked questions about your level of involvement in sport and physical activity during high school and adulthood, your relationships with co-workers, how you came to work in your chosen occupation or industry, and how gender has affected your work experiences and decisions.

If you are willing to be interviewed, please return the enclosed postcard, email me at mclau137@umn.edu, or call me at (612)860-5141 to set up an appointment. I am also available by email or phone to answer any questions you have about the study. Your decision to be interviewed, or not, will in no way affect your participation in the Youth Development Study. The choice is entirely your own.

Thank you for considering an interview.

Sincerely,

Heather McLaughlin
Ph.D. Student, University of Minnesota

Consent Information Sheet

You are invited to be in a research study on high school sport participation and young adult work experiences, including supervisory authority, relationships with co-workers, and differences across occupations. You were selected because of your participation in the Youth Development Study at the University of Minnesota. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

Background Information:

The purpose of this study is to understand how participation in sport and physical activity during high school has influenced women's careers and patterns of work.

Procedure:

If you agree to be in this study, I would ask you questions about your level of involvement with sport and physical activity, your relationships with colleagues, how you came to work in your field, and how gender affects your work experiences. For example, I will ask whether women and men perform different roles at your organization and whether you get along with your supervisor(s). The interview should take about 60-90 minutes.

Risks and Benefits of Being in the Study:

If you complete the entire interview, you will receive a \$50 payment, in addition to payment you may receive for completing our annual mailed surveys. You may skip any questions that you are not comfortable answering and still receive payment at the end of the interview.

There are no foreseeable risks to being in the study. If you decide to participate in the interview, you may withdraw at any time. Your right to withdraw from the study or to skip particular questions will be honored by the interviewer and you will not be pressured to continue. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota or the Youth Development Study. If you decide to participate, you are free to withdraw at any time without affecting those relationships.

Confidentiality:

The records of this study will be kept private. In any report we might publish, we will not include any information that will make it possible to identify you as an interview participant. Any quotations from your interview that appear in any report will be identified by an alternative name (pseudonym), and any information that might identify you (such as the name of your employer or coworkers) will be eliminated or altered. Research records (including interview notes and audio tapes) will be kept in a locked file; only the researcher will have access to the records.

Contacts and Questions:

The researcher conducting this study is Heather McLaughlin, a doctoral student in the Department of Sociology at the University of Minnesota. You may ask any questions you have now. If you have questions later, you may contact Heather McLaughlin (mclau137@umn.edu) at the University of Minnesota, Department of Sociology at (612) 624-0081 or (612) 860-5141.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you may contact the Research Subjects' Advocate line at (612) 625-1650, D528 Mayo, 420 Delaware Street Southeast, Minneapolis, Minnesota 55455.

Please keep this form for your records.

Interview Guide

We'll start by talking about your experiences playing sports during high school, and any participation during college or as an adult. Then, I'll ask you questions about your work aspirations – in terms of what your ultimate career goal is now and what you wanted to be or do when you were younger – your current job, and some of the other jobs you've held since high school. Do you have any questions before we get started?

High school sport participation

- Tell me about the sports you were involved in during high school (sport type, level)
- Did you have a favorite sport that you participated in? Why?
- Tell me a bit more about [Sport #1], what was that like?
 - How did you get into playing [sport #1]?
 - Looking back now, what do you most remember about this sport?
 - Relationship with coaches, teammates? still keep in touch?
 - Did you enjoy playing sports during high school?
 - What did/didn't you like about it?
 - Ever times not fun?
 - Win? Did that matter? Emphasis on winning? What did coach/teammates/family want you to get out of experience?
 - How did others react to [sport #1] players?
 - Participate outside of school? (with same peers? coed?)
 - What do you think you got out of playing [sport #1]?
 - teach you any lessons or values? How instilled that? Examples?
- Taken together, anything else got out of sports that you think are important to your identity now, either personality or habits or relationships?
- Were sports important in your family? Did parents encourage you to play?
- Would you consider yourself an athlete or “jock” when you were in high school? Why/why not?
 - Did that peer group exist at your school?
- Do you think you've established certain networks or friendships that you otherwise wouldn't have because of your sport participation?
 - Have those networks helped you get into school or get a job?
 - Do you ever talk about your sport participation with your boss or coworkers?
- Do you think people act or feel differently when talking about girls' vs. boys' sports?

- Do you think your school devoted more resources or attention to boys' sports? Fans? Town?

Adult sport participation

- Do you continue to play any of the sports you played in high school? Why/why not?
 - If no, do you wish you continued playing?
 - If yes, with who? What level (competitive, informal, etc.)? How often?
 - What do you get out of it? Why do you keep doing it? Importance?
- Do you play any sports now that you didn't play while in high school?
 - How did you get into [sport]?
 - Other types of exercise, like running or yoga, to stay in shape?
- How important is sport in your current life? for your other family members?
 - If kids, do they play? Would you encourage your children to play? Why/why not?
 - Any sports wouldn't want your kids to play? Matter if girl or boy?
- Anything else like to add about sports, either high school or after that you think is important?

I want to switch gears and talk about your work/career. Would you like to take a short break before we begin?

Current Job

- Where do you work? What is your official title, if you have one?
- What do you do on a day-to-day basis?
- How do you like your job?
- Is it what you thought it would be like when you first applied?
- What drew you to this type of work?
- Have you worked your way up, or have you held the same job the whole time you've worked here?
- Do you see yourself switching careers, or will you continue working here long-term? Why/why not?
- What types of traits do you think are important to be successful at your job?
 - Competitive; Independent; tough-skinned; composed under pressure; unemotional; persistent;
- How big is your office?
 - Who do you work with most frequently in your office?
 - Both men and women? Spend more time with one over the other?
 - Do you get along well with your co-workers? How about with your boss(es)?

- Do your co-workers and supervisors treat men and women equally at your work?
- Do the types of jobs or roles at your workplace vary for men and women? How so? Why?
- Is your industry more male-dominated or female-dominated overall? What makes it that way?
 - Would you ever consider working in the opposite? Why/why not?
- Are you a supervisor?
 - If no...
 - Would you like to work towards a supervisory position? Why/Why not?
 - Have you ever held a supervisory position at your current workplace?
 - If yes...
 - How many people do you supervise?
 - What is your relative position of power at work (in other words, how many people are above you in the organizational hierarchy)?
 - How do your responsibilities differ from non-supervisors at your work?
 - Do you have a good relationship with people below you?
 - Are most supervisors women, men, or pretty evenly split?
 - If men, are you one of the only women supervisors? How do you think that affects your relationships with co-workers?
- Do you ever talk about sports at your office?
 - When does it come up? With who?
 - Play sports with any of your co-workers? Other co-workers play with each other? Who?
 - Do you think any of the things you talked about with sports relate to your current job? (e.g., values)
- Is there anything else about your current job that you think is important to talk about?

Let's talk now about your aspirations and some of the other jobs you've held since high school...

- What is your ultimate career goal?
 - Do you think you'll reach this goal? Why/why not?
- Is your current goal different from what you wanted to be when you were in high school?
 - If yes, what did you want to do when you grew up?

- What made you choose that as a career?
 - at all related to your participation in sports, either because related to certain values or traits that you thought were important or coaches/teammates talked about that career.
- Did you know anyone else, personally, who worked in that career?
- What did your parents do for work when you were growing up?
- How did your goals or aspirations change over time?
 - Why do you think they changed/didn't change?
- Did you go to school after high school to be a **high school aspiration**?
 - What types of educational institutions did you attend?
 - Why did you choose schools?
 - Did you play sports in college?
 - Sports affect where you went to school, either as fan or participant?
 - Sports affect your time in school, either as a fan or participant?

Let's talk about how you ended up in your current job...

- How did you go from wanting to be a **high school aspiration** to doing what you do now?
 - Did you hold lots of different types of jobs along the way?
 - What are some of your most memorable or longest jobs?
- For each job...
 - What types of things did you do at **Job #1**?
 - Did you like working at **Job #1**?
 - Did you get along well with your co-workers at **Job #1**? Explain.
 - Was there a lot of division between the types of jobs or tasks that men and women did, or how men and women were treated by the company or supervisors?
 - Were you a supervisor? If yes, what was that like?
 - Why did you leave **Job #1**?
 - At any of your other jobs, did you talk about sports at the office, or play sports with co-workers? Do you know if other co-workers play sports together, even if you didn't? Who?
 - Anything else about this job that is important to talk about, or is related to some of the things I asked you about your current job?