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Youth Sports Participation and Delinquency

by

Jordan Keith Miller

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To the Graduate Faculty:

The Members of the committee appointed to examine the thesis of Jordan Keith Miller find it satisfactory and recommend that it be accepted.

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ABSTRACT

Youth sports have been seen as being good for the athletes; to learn proper morals and behaviors that are important later in life. But what if youth sports are actually teaching the athletes behaviors that are undesirable: cheating, lying, and doing anything it takes to win. Using the Adolescent to Adult Health (ADD Health) data set, this study looks at youth sports participation and delinquency. Using Pearson's Chi Square and Analysis of Variance, this study seeks out an answer to this question. I conclude that sports participation is related to some forms of deviance. Violent delinquencies such as participating in a fight, participating in group fights, and seriously injuring someone are significant when compared to sports participation. Non-violent delinquencies that are significant include damaging property, painting graffiti, and smoking cigarettes. While there is some significance, a more comprehensive study of sports participation and delinquent activities would allow for a better understanding of the connection between sports participation and delinquency.

Chapter 1-Literature Review and Theory

Introduction to this study

The world is enamored with sports. Competitions can range from pick-up games in the neighborhood to international events. Athletes are treated as celebrities, even at the high school level. So when one of the celebrity athletes gets involved in a delinquent act, it quickly becomes headline news. With news outlets headlining athletes' delinquencies, it appears that athletes engage in more delinquent acts than their non-athlete counterparts. This study is utilizing a sample of teenagers who self-report on sports participation and delinquent acts to examine if those who participate in sports commit more delinquent acts than those who do not participate in sports.

Sport is a critical social institution in cultures around the world (Davis and Menard 2013). The world is intrigued by sports and the athletes. One of the greatest examples of good sportsmanship comes from a football game in 1940 where Cornell won the game 7-3. A video review of the game shows a 5th down was awarded to Cornell on their touchdown drive. Cornell's team decided to award Dartmouth the 0-3 victory over them because of the mistake on the field (Eitzen 2012). On the other hand, the University of Colorado scored a game-winning touchdown on a drive that included a 5th down that was not noticed during the game. Colorado refused to forfeit this game to their competitors, providing an example of the importance of winning (Eitzen 2012).

Ideally, youth sports help athletes to develop traits that society find desirable. The example of Cornell giving up their win because of an unfair play is

a great example of the goal. Some of these characteristics include learning to "… strive for excellence, to persevere, to sacrifice, to work hard, to follow orders, to work with others, and to be self-disciplined" (Eitzen 2012 p.62). Other values include success, competition, the valued means to achieve, progress, materialism, and external conformity (Eitzen and Sage 2009). There are a number of benefits to participating in sports— "physical, emotional, psychological, and social—and that it is a uniting force in bringing people together. Sport participation can help build character, encourage emotional growth, and teach players and spectators the value of honesty, respect, teamwork, dedication, and commitment" (Tygart et al. 2014 p. 7).

Sports have a dark side that is not often discussed. Banham claims that good sportsmanship is the goal, but bad sportsmanship also happens (1965). Some of these behaviors include selfishness, hostility, and bad temper (Banham 1965). Sports teach us that we should be playing by the rules, but when possible to try to get around rules in order to get ahead (Charnofsky 2003). News of cheating, fighting, and infidelity plague the sports sections of newspapers and television programs alike. Are athletes more deviant than non-athletes? Do they think it's okay to bend the rules because others before them have done it and get away with things that "regular" people don't get away with? Phrases such as "nice guys finish last," "winning isn't everything, it's the only thing!" and "just win baby!" necessitate the importance of winning over any other aspect of sports (Chanofsky 2003). The virtues that were once part of sport become sparser as a win-at-all cost mentality is fostered (Chanofsky 2003). Others have found that

longer participation in sport caused athletes to become more calloused in their morals (Stoll and Beller 2000). This is especially true for athletes participating in team sports (i.e. football, basketball, soccer) as compared to individual sports (i.e. tennis, golf, swimming) (Stoll and Beller 2000). Other findings on morality show that athlete's score lower than their non-athlete peers on moral development and that male athletes score lower than female athletes in moral development. However, the average score for female athletes has been declining over the last few years. Moral reasoning scores for athletic populations steadily decline from the ninth grade through college age, whereas scores for non-athletes tend to rise (Eitzen 2012).

When studying the impact of sports on delinquent behavior, we tend to focus on adult elite athletes who have been charged with a crime but have found their sentences to be reduced or dropped (Benedict and Klein 1997; Gidycz, Warkentin, and Orchowiski 2007). This approach is one way to look at the interaction between sports and delinquencies, but looking into the connection between sports participation and delinquencies should occur at a younger age.

To understand how youth could be learning from sports culture, we must look to who was playing during the mid-1990s One prominent player, Charles Barkley, was a fantastic basketball player, but also was in the spotlight for a lot of issues. Barkley was fined and suspended in 1991 for an incident where he attempted to spit on a heckler, and instead ended up spitting on a young girl in the stands (*The New York Times* 1991). This incident was just one part of a multitude of warnings and fines for such behavior from Barkley over his years of

playing (*The New York Times* 1991). Mike Tyson was another prominent athlete in the 80's and 90's. While he was immensely successful in the ring, he was found guilty of the rape of Desiree Washington, committed in 1991 (*New York Daily News* 2015). This is still an issue today as we have seen Brock Turner, a member of the Stanford swimming team, received a drastically reduced sentence for sexually assaulting a woman outside of a frat house. It could be argued that athletes are treated just like other celebrities. While that is indeed an issue, I argue that those who participate in sports feel that they are more connected to athletes because they have something in common with them. All celebrities could have an influence on youth, but celebrity athletes can affect the youth participating in sports more.

Coaches also have a profound influence on young athletes. They have been found to tell players to deliberately injure an opponent. For example, girls from one Oklahoma high school basketball team had a set play designed to throw the ball into the face of the star player from the opposing team (Smith 2015). Some coaches don't consider rule breaking as cheating. Jim Boeheim, the men's basketball coach at Syracuse, claims that rule breaking is a lot different from cheating (Wolken 2016). Whether athletes see these coaches as a role model or are simply following their rules, there are some serious implications that come from listening to these coaches.

The research question then is if participation in sport indeed increases criminal or deviant behavior. To answer this question, I will use the Adolescent to Adult Health (ADD Health) public use data. Using sports participation as the

independent variable, I will look at variables pertaining to violent and non-violent delinquencies as well as substance abuse. Age, race, gender, type of sport (team sport vs individual sport), contact vs non-contact sports, and number of sports being played will all be control variables.

The literature review will describe the scope, consequences and causes of delinquency among athletes. I use the works of Pierre Bourdieu and Social Learning Theory (Albert Bandura and Richard Walters) to frame this study and explain my findings. The methods section covers the data, the sample, and statistical analysis utilized in this study while the results will describe in detail the connection between sports participation and delinquencies. The discussion section will attempt an explanation of the findings using existing literature and applying the theories mentioned above. The limitations of this study, possible alternative explanations, and plans for future research will conclude this thesis.

Athletes and the Law

Athletes in American society are treated as heroes, celebrities, and role models. Sports biographies describe adversities athletes overcame, and their positive outlooks and virtuous character led to sucess (Hyman and Sierra 2009). Athletes are bigger than life, literally, as Fat Heads, and in video games (Hyman and Sierra 2009). Fantasy sports emphasize personal accomplishments over teamwork (Hyman and Sierra 2009). The sport industry generates an estimated $213 billion a year from the athletes, owners, businesses, and media (Adams 2009).

Athletes are also the sources of a lot of media attention. Several television channels and magazines report solely on the personal lives of athletes (Hyman and Sierra 2009). Stories of athlete's indiscretions are media lightning rods, with the behaviors headlining news articles (Hyman and Sierra 2009).

When they are found guilty of deviant or criminal activity the spotlight is extremely bright. Research has been conducted comparing athletes to their non-athlete peers and findings indicate that athletes are less likely to be adjudicated for delinquency (Eitzen 2012). There are two theories for this occurrence: 1) delinquency-prone individuals don't try out for sports or get cut from sports because they won't conform to team rules, and 2) athletes may receive preferential treatment, which keeps them out of the courts (Eitzen 2012). Eitzen notes that reports of athletes' deviant acts are more publicized and give an inflated view of the occurrence of deviance among athletes (2012). To understand this inflated view, Eitzen looks to many studies of deviance to explain his ideas.

Eitzen found that male student-athletes comprised 3.3 percent of the total male population, yet represented 19 percent of the perpetrators reported for sexual assault. From January 1 to August 31, 2010, 125 professional and college athletes were charged with serious crimes. Women were the alleged victims in almost 20 percent of the cases. A study of the criminal background checks on every player of Sports Illustrated's 2010 pre-season Top 25 teams found more than two hundred players were arrested or cited by the police a total of 277

times. One out of every fourteen players (7 percent) had a criminal record. (Eitzen 2012)

The boys club that is male sports are expected to act aggressive, take risks, and have dominating personalities (Eitzen 2012). Sociologists have studied male locker rooms and found that talk among the athletes was focused on aggression and women as objects; this talk leads to an athletic subculture that legitimizes rape and aggression in general (Eitzen 2012).

Benedict and Klein found that a mere 31 percent of athletes accused of sexual assault were convicted whether it was a plea agreement or jury conviction (1997). While this number may seem low, the authors found that in the general population, only 32 percent of sexual assaults that were reported to the police resulted in an arrest, compared to 79 percent of athletes arrested on suspicion on sexual assault (Benedict and Klein 1997). While the arrest rate of the general population was lower, the percent of arrests resulting in convictions of sexual assault is 54 percent, an increase of 22 percent from the arrest rate (Benedict and Klein 1997). In comparison, a 31 percent conviction rate of athletes was a decrease of 48 percent from the arrests of athletes, meaning fewer are being charged for the crime they were arrested for (Benedict and Klein 1997).

Benedict and Klein hypothesize that lower conviction rates come for two reasons; first is what they call the jock-groupie dyad; the second is the jock safety net (1997). The women who make themselves available to athletes are called groupies, much like the women who follow music bands or other famous

individuals around. The jock-groupie relationship is perceived differently by each side (Benedict and Klein 1997). If the relationship turns sour and accusation of sexual assault come before a judge, defense attorneys will quickly use this dyad as a defense, claiming that consent was perceived to be there in some way (Benedict and Klein 1997). This is then used to paint the accuser as an individual of ill repute and the athlete as a victim (Benedict and Klein 1997). The jock safety net, on the other hand, is the superb legal counsel that athletes may receive from their connections to financial resources, and advocates in the form of coaches, agents, lawyers, and parts of the community (Benedict and Klein 1997). The athletes have access to legal counsel that can push back dates to allow them the ability to finish out their seasons, options that a "normal" citizen may not have (Benedict and Klein 1997).

Another interesting note is how college athletes often are treated with a "kids glove," even though they are adults in the eyes of the law. Athletes learn that their status as athletes gives them preferential treatment and that they might get away with crimes (Otto 2009).

Snyder (1994) studied athletes who had no need to turn to deviant acts to attain what they wanted. These individuals all were from well-off families who could afford to get what they wanted yet they still turned to crime. These athletes stole six or seven computer systems at a time. According to Snyder, four factors explain this unusual behavior: flawed character traits, use of alcohol, peer pressure, and thrill seeking (Snyder, 1994)

Substance Abuse

Leinfelt and Thompson looked at the number of drinking-related arrests in a college town (2004). In 2001, the last year of the study, college students made up 21.4 percent of the total arrests on drinking related charges (a total of 2,429 arrests) (Leinfelt and Thompson 2004). 5.6 percent of the college students that were arrested were athletes (Leinfelt and Thompson 2004). Athletes are found to be three times as likely as non-athletes to be arrested for alcohol related charges (Leinfelt and Thompson 2004). One reason for the higher arrest rates of college athletes is that student athletes tend to drink more than their non-athlete counterparts, they tend to drink more frequently, more heavily, and have more encounters with law enforcement than non-athletes, leading to a higher likelihood of athletes being arrested on alcohol related charges (Leinfelt and Thompson 2004).

Substance abuse is not just an issue for college athletes. The Panhandle Prevention Coalition used data from the American Athletic Institute to better understand alcohol use among high school athletes (2010). Fifty-nine percent of high school athletic directors in one study reported incidents of dealing with intoxicated athletes (Panhandle Prevention Coalition 2010). The American Athletic Institute found that 14.1 percent of the athletes started drinking alcohol in the 7th grade. Alcohol use peaked by 12th grade with over half of the athletes reported drinking (58. 5 percent) (Panhandle Prevention Coalition 2010).

Denham used social identity and peer cluster theories to examine the relationship between high school sports participation and substance use (2014).

The most commonly used substances among high school athletes were alcohol, marijuana, and prescription drugs (Denham 2014). Football players used alcohol, marijuana, and prescription drugs more than other sports, due in part to the violent nature of the sport and the injuries they sustained from playing (Denham 2014). When it came to racial differences, nonmedical uses of prescription drugs was more common for White and Hispanic males than for black males while white females reported using prescription drugs at a higher rate than their Hispanic and black counterparts (Denham 2014). One possible explanation for the lower rate of substance use among black athletes is using sports as a means of upward social mobility and not wanting to jeopardize those chances (Denham 2014).

Race and Crime

Race and crime are associated. This also applies to athletes. Snyder was surprised to find that all nine athletes he studied were White and noted it wasn't normal behavior for White middle-class individuals (1994). Mastro, Blecha, and Seate (2011) examined newspaper articles pertaining to athletes committing crime. They found that Black athletes were overrepresented in news articles about crime at a rate of 61.6 percent compared to 16.1 percent of White athletes, 3.0 percent of Latino athletes, and 19.0 percent of athletes of other or unknown race (Mastro et al. 2011). In 82.3 percent of the stories about crime, black athletes were the primary subjects, a higher percentage than the percentage of Black athletes in football (67 percent of players) or basketball (77 percent of

players) (Mastro et al. 2011). Football has the highest crime rate and basketball has the highest representation of Black athletes (Mastro et al. 2015).

Mastro, Blecha, and Seate also found that articles that discussed Black athlete's crimes were more explicit and had more negative consequences (blame, derisive, sympathy to the victim) compared to their White counterparts (2011). Stories of black athletes were quick to place blame, were more derisive, and were sympathetic to the victim. This would have readers believe Black athletes are more prone to being criminals and were thus treated differently (Mastro et al. 2011). One of the most startling findings was how reports about White athletes were more thematic (situational explanations for the crime) whereas reports about Black athletes were more episodic (emphasis on personal blame), stereotyping Black athletes as being more prone to deviance while reinforcing the idea that Whites are not to blame for their deviance (Mastro et al. 2011).

Berry and Smith also looked into sports, crime, and racial representation (2000). They found that "race is the master status defining the actor as crime-prone, regardless of other traits, skills, or accomplishments" (Berry and Smith 2000). Berry and Smith explain that the larger proportion of crimes committed by Black athletes is due to the high number of Black athletes in both basketball and football (2000).

Racism and discrimination exist at all levels of sports. At the collegiate level, minority athletes often encounter discrimination from professors and administration (Comeaux 2010). Athletes experienced Color-blind ideology and

racially coded language (Comeaux 2010). Sports administration is also racially divided. Blacks made up the majority of the athletes, but very few minorities can be found at the upper administration (McCormick and McCormick 2010). The presidents of the schools and NCAA conferences make a large sum of money from the performances of the athletes, creating a modern apartheid where a lot of Black athletes are making money for very few White men according to McCormick and McCormick (2010).

Athletes and Morals

Sharon Stoll and Jennifer Beller have spent a significant amount of time studying athletes and their morals in comparison to non-athletes. Together, they conducted 35 studies using the Hahm-Beller Values Choice Inventory (HBVCI) evaluating over 90,0000 individuals. They found that there is no empirical support for the idea that sport builds character (Beller and Stoll 1995). In fact, those in competitive sports have to decide what is more important, winning or sportsmanship and fair play (Beller and Stoll 1995). Findings indicate that the longer an individual participates in sport the more calloused they will become in their morals (Stoll and Beller 2000). This has been consistent among men, and among female athletes they have seen an increase in calloused morals. Female athletes, especially those in team sports, are socialized in the same manner as male athletes; they are a part of the capitalistic enterprise of sports and have become a commodity. In this capitalistic model, athletes need to be more

concerned about themselves and less concerned for others (Beller and Stoll 1995).

The scores for female athletes have steadily lowered since their first studies in the 80s, where they first scored in the high 60s (on a scale from 21-105), but have since seen their scores drop to the low 50s (Stoll and Beller 2000). Scores between mid-50s and low-60s have a moral reasoning equivalent to a typical junior high student. Individuals scoring in this range are concerned with what's in it for me; what it takes now to win; or what someone tells me is right, there is little concern, if any, for others (Stoll and Beller 2000).

Athletes participating in team sports are especially susceptible to being morally calloused compared to those who are participating in individual sports, but those in individual sports have been found to be more susceptible to moral callousing than non-athletes (Stoll and Beller 2000). The overall scores are found to decline steadily from ninth grade though their college years, while at the same time, the scores of non-athletes typically tend to rise (Stoll and Beller 2000).

Why this study

Many regard sports as positive for society. We talk about sports and their positive values, but sports also teach those who participate that it is okay to bend the rules in order to win. This mentality goes beyond the sport arena into everyday life. Athletes get away with more, are punished less, and are treated

differently. This begins at an early age and gets worse the longer an individual plays.

Athletes may find themselves involved in different types of delinquency. Violent delinquency is prominent, especially violence against women. Non-violent delinquency starts at a younger age and may be an entry into violent delinquencies. Substance abuse may also begin at a young age. Some substances are legal at certain ages, but excessive use can be harmful for the body and create lapse in judgment.

This study is looking to see if high school aged individuals who participate in sport differ in crime rates or types of crime from those who do not participate in sports. I will control for race, age, gender, and types of sport played. This study is looking to answer the question if participation in sport increase criminal or deviant behavior.

Theory

To explain why athletes might be more prone to breaking rules we will look to Pierre Bourdieu and his concepts of the *habitus* and the *field* and Social Learning Theory developed by Bandura and Walters. Bourdieu argues that the *habitus* is a filter that structures an individual's perceptions, experiences, and practices (Bourdieu 1984). This filter becomes commonsense knowledge. The habitus is how we navigate the world around us; we simply know how to do what we are doing because it appears natural. Individuals in society are able to

navigate social environments from past experiences. Baseball players "just know" how and when to swing at a fastball without thinking about it.

There are many skills that an individual learns in life, but those skills are not helpful in all situations. For example, an individual who grows up in a crime-ridden neighborhood will learn how to navigate their neighborhood without getting hurt or in trouble. While this skill is helpful in a bad neighborhood, these skills aren't helpful in other settings (Bourdieu 1984). To take this to the sports world, an individual may learn to break the rules from a coach or teammate and find the skill useful in sports. While many may not take this skill outside of the sports realm, they have acquired the "skill" and they could take this skill into other fields of society. Cheating or breaking the law may seem like a "natural" way to get something that they want.

Bourdieu's other concept, the field explains that society is broken into different social areas with their own rules and forms of capital (Bourdieu 1986). There are many examples of fields: art, education, religion, and law to name a few (Bourdieu 1984). Fields tend to be distinct from one another, but there are instances where they will overlap (Bourdieu 1984). This overlap is where conflict can occur; individuals may take some rules from one field to another field assuming they fit both fields (Bourdieu 1984).

Fields are found to be resistant to change. The interest of participants in the field is to gain status and control (Bourdieu 1984). For example, any artists may attempt to change the established rules in the arts and they will find others may not accept their art (Bourdieu 1984). The next generation of artists to come

around will critique those who came before them as well in order to gain their own position in the field, creating constant competition in the field (Bourdieu 1984). In the sports field, winning comes first. Coaches and players do whatever they can to win, including cheating or bending the rules. Players who learn to cheat or bend the rules to get ahead in their games may take this "skill" to other fields in order to get ahead and gain status.

Each field requires a certain habitus for participation. In the sports field, an individual needs a sports habitus to understand the language and symbols that are present. The sports habitus may include competitiveness and self-discipline, which are both desirable traits in other fields. The issue is that not all traits from one field are desirable in other fields. In sports, aggression is key. Some sports even require combative tactics and striking of opponents. This aggressive and combative nature is not common in other fields. There can be confusion when one field is similar to another, but only certain aspects of the habitus from one field are desirable.

There is a connection between capital and fields through the habitus. For Bourdieu, capital goes beyond the economic aspects and goes into the symbolic realm. Economic capital refers to material resources. Cultural capital is the nonmaterial goods that can be converted into economic capital. Examples include expertise, verbal skills, and aesthetic preferences (Bourdieu 1986). Social capital refers to the networks of contacts or acquaintances that can be utilized to help gain status in their social spaces (Bourdieu 1986).

First, we must understand that there are different types of capital, and these forms of capital effect individuals differently. Individuals can have social, cultural, or economic capital. People will have different types of capital from one another, as well as different amounts of each capital. Individuals in the middle class will have similar amounts of capital to one another, but the type of capital might be different: one individual may have a lot of social capital with little economic or cultural capital, while another individual may have an equal amount of all three types of capital. While they may possess the same amount of capital, the composition of capital might be different, thus they may have a different habitus. Even in the sports field, an individual with more economic capital may differ from others because they may be playing sports that require more money to participate.

The concepts of the habitus and field help us explain how traits and attributes learned and used in one area of life make their way into other areas of life. The work of Bandura and Walters explain the issue at the micro level. Social Learning Theory explains how individuals learn a behavior and how that behavior is reinforced.

Social learning theory uses both behavioral and cognitive theories to explain the wide range of learning experiences that individuals experience in their lifetime (Bandura & Walters 1963). Bandura and Walters list three tenets that make up social learning theory. First, learning is not strictly a behavioral trait; rather it is a cognitive process that takes place in a social world (Bandura & Walters 1963). Learning can occur through observation of a particular behavior,

and individuals later turn that behavior into their own action (Bandura & Walters 1963). Another important tenet of social learning theory is reciprocal determinism, which is the idea that the learner is influenced by their cognition, their environment, and their behavior (Bandura & Walters 1963). The three tenets help us understand how teammates, coaches, or parents may influence an athlete.

When a behavior is learned from observation, four factors influence how that information affects the observer. The first is attention: where the observer must pay attention to what is going on in order to learn a behavior (Bandura & Walters 1963). This can be from coaches instructing specific plays to watching how a professional does something and later trying it out. In both cases, the individual has to be paying attention to learn. The second influence on behavior is retention; the individual has to remember the features of the behavior in order to be able to reproduce the observed behavior (Bandura & Walters 1963). If a player on a team forgets what a certain play is, they are not going to be successful in accomplishing that play and the results could be sitting on the bench. The third influence is reproduction, where the observer must replicate the behavior they are observing (Bandura & Walters 1963). They must take what they have been learning through observation and retention to reproduce the effect. A player can run the right route if they have observed and learned the proper play from their coach, creating the opportune play. The last process is motivation, where the individual wants to reproduce the behavior (Bandura & Walters 1963). If an individual is not motivated, they will not be successful.

The work of Pierre Bourdieu along with Bandura and Walters illustrate how individuals may learn a behavior and take it to different areas of life. Different fields have different desired and allowed behaviors. When an athlete learns a behavior in one field, they may be applying that behavior to other fields where it is unacceptable.

Chapter 2- Methods

In this study I examined if participation in sport increases criminal or deviant behavior. I developed five hypotheses to help answer this question:

H_1: Participation in sport increases violent behavior.

H_2: Participation in sport increases non-violent behavior.

H_3: Participation in sport increases substance abuse.

H_4: Those who participate in team sports are more likely to be deviant

H_5: Older participants in sport will have higher rates of deviance

I used Wave I data from the Adolescent to Adult Health (Add Health) Public Use Dataset for this study. The Add Health study followed a cohort interviewing them four times since the school year of 1994-95 when they were in grades 7-12 (Add Health 2016). The initial wave of in-home interviews consisted of 12,105 adolescents. With additional oversamples based on ethnicity, saturation, disability, and genetics the total number of participants was 20,745 (Add Health 2016). Wave II was conducted in 1996, Wave III in 2001, Wave IV in 2008, and plans are in place to conduct Wave V beginning in 2016 and going through 2018 (Add Health 2016). Public use data is open to the public for download, while the restricted datasets need special permissions for use.

The Add Health data has been utilized in many research studies. Over 500 studies in 2014 used Add Health data (Add Health 2016). Crime and delinquency was the 5th most published area utilizing Add Health data, with the *Journal of Youth and Adolescence*, *Criminology*, and the *Journal of Criminal Justice* as the top three publication sites (Add Health 2016).

While the Add Health data has been a source for many publications on juvenile delinquency, it should be noted that this data set was not created to examine teenage

delinquency. The study was originally designed to study adolescent health and reproductive behavior following a mandate from the U.S. Congress (Add Health 2016). The core of the Add Health data set deals with health and lifestyle. Questions pertaining to risk taking and other activities were included, but were not intended to be used as a criminal data set. However, because the data set is a large representative sample of the United States it is useful for other research, including research on deviant and criminal behavior (Add Health 2016).

Wave I data began with an in-school sampling frame. The in-school sampling frame was used to screen for individuals who would be of interest to the researchers. The ease of access to the respondents' peers was key to the research study (Add Health 2016). To ensure that the researchers were using schools that were representative of US schools, systematic sampling methods and implicit stratification were utilized to find the 80 high schools represented (Add Health 2016). Feeder schools that included a 7th grade and sent at least five graduates to one of the high schools from the initial study were also included in the in-school questionnaires (Add Health 2016).

Once the schools were identified, over 90,000 students in grades 7 through 12 were administered the in-school questionnaire (Add Health 2016). The questionnaire covered a variety of topics, including social and demographic characteristics of respondents, household structure, risk behaviors, self-esteem, health status, and school-year extracurricular activities (Add Health 2016).

After the in-school questionnaires were completed roughly 17 students were chosen at random from each stratum from each school for in-home interviews. The core sample for in-home interviews included 12,105 adolescents (Add Health 2016).

Special oversamples were drawn from the in-school questionnaires to include four supplementary ethnic-group samples with 1,038 blacks from well-educated

families, 334 Chinese, 450 Cuban, and 437 Puerto Rican respondents (Add Health 2016). Saturation was another special oversample to the study as the researchers wanted to analyze social networks. All 589 students who self-reported a physical disability were selected for in-home interviews (Add Health 2016). The last special oversample is the genetic sample, which consists of siblings living in the same households. The interviewers were especially interested in identical twins, fraternal twins, and half siblings (Add Health 2016). Non-related siblings were also part of the genetic specific oversample. Stepsiblings, foster children, and non-related, adopted siblings were included to analyze the difference between parental social influence and parental genetic influence (Add Health 2016).

All of the in-home interviews were conducted using the same interview schedule, lasting one to two hours (Add Health 2016). The in-home interview covered the following topics: health status, health-facility utilization, nutrition, peer networks, decision-making process, family composition and dynamics, educational aspirations and expectations, employment experience, the ordering of events in the formation of romantic partnerships, sexual partnerships, substance use, criminal activities (Add Health 2016).

The public use dataset includes 6,504 participants. Of those, 4,751 participants also completed the in-school survey. I excluded 167 participants who did not have valid responses in the dependent variables through selecting the cases with missing data. Thus, the full sample size for the current study is 4,584.

Measures

Sports Participation

Respondents were asked in the Wave I in home interview how often in the last week they had played an active sport. This is a very basic question and does not ask about types of sports played. To obtain data on different types of sports, the Wave I in-school questionnaire was used. The questionnaire asked about participation in baseball/softball, basketball, field hockey, football, ice hockey, soccer, swimming, tennis, track, volleyball, wresting, or other sports. Participation in specific sports were dichotomously coded as 1 for those who said they participated in or planned to participate that year in any one of these sports or 0 if they did not participate in or plan to participate in any of the sports. This variable is discussed further in the results to account for any issues that may have come up.

Substance Use

Substance use was measured in Wave I by asking participants different questions about substance use. This study is only interested in the most recent use of substances, so questions that asked the most recent timeframe were utilized. Many of these questions had legitimate skip as a response for those who had never used a substance. To utilize as many participants as possible, those who were coded as "legitimate skip" were recoded to be 0 or never depending on the framework of the question. The variables used were: during the last 30 days, on how many days did you smoke cigarettes; during the last 30 days, on how many days did you use chewing tobacco or snuff; over the last 30 days, on how many days have you gotten drunk; during the last 30 days, how many times have you used marijuana; during the last 30 days, how many times have you tried any kind of cocaine; during the last 30 days, how many times have you used inhalants; during the last 30 days, how many times have you

used any illegal drugs (such as LSD, PCP, Ecstasy, Mushrooms); during the last 30 days, how many times have you injected heroin.

Non-violent Behavior

Non-violent behavior was measured in Wave I by asking individuals about their delinquencies. Participants were asked how often in the past twelve months they had painted graffiti or signs on someone else's property or in a public place; deliberately damaged property that didn't belong to you; took something from a store without paying for it; drove a car without the owner's permission; stole something worth more than $50; got into a house or building to steal something; or stole something worth less than $50.

Violent Behavior

Violent behavior was measured in Wave I by asking individuals about their delinquencies. Variables that asked about violent delinquencies were included in this design. Participants were asked how often in the past twelve months they had gotten into a serious physical fight; hurt someone badly enough to need bandages or care from a doctor or nurse, used or threatened to use a weapon to get something from someone, or; participated in a group fight.

Control Variables

The current study included the following controls in the analyses: age (measured in years), race and ethnicity, gender, number of sports played, type of sport played and contact versus non-contact sports. Age was broken into three categories. The age groups were 14 and younger, 15-16 years old, and 17 and older. This break created equal group sizes, and allowed comparison for specific ages in schooling. Those that are 14 are typically in the 8th grade, and mostly in middle school. The 15-16 year groups are the first couple of years in high school, the freshmen and sophomores, while

the 17 and older are those who are typically in their junior and senior years in high school. Race was broken into two categories (White and minority) to create equal group sizes. The number of sports played was a summation of the responses to the in-school questionnaire. Responses were reported as 1 for yes and 0 for no, these were then added together and the total was the number of sports that individuals participated in or were planning to participate in. The type of sport played was created from the in-school questionnaire where the participants responded to participation in or plans to participate in different sports. Team sports consisted of baseball/softball; basketball; field hockey; football; ice hockey; soccer; and volleyball. Individual sports consisted of swimming; tennis; track; wrestling; other sports. Those who participated in both team sports and individual sports were given their own category. While many of the individual sports have a team sport aspect, they are primarily played on a one-versus-one basis. Contact sports are those where individuals will hit or collide with one another as well as inanimate objects. There are two types of contact sports: sports where athletes will hit or collide with one another, while limited contact sports are those where athletes will have contact with one another with less force. Limited contact sports are basketball and soccer. In this study, non-contact sports included baseball/softball; volleyball; swimming; tennis; track; and other sports (other sports were not specified in the dataset). Contact sports included field hockey; football; ice hockey; wrestling; basketball; and soccer.

Analytic Strategy

The study utilized two statistical models. The first was Pearson's chi-square hypothesis test to compare groups of sports participants to one another. Of the 19 variables present, 13 variables utilized this approach. A Proportional Reduction in Error

test was used to interpret the strength of the correlations. Because these variables were ordinal variables and collapsed data, gamma was used to find the strength of association. As such, partial gamma was utilized for the control variables to see differences between the groups. The second model used Analysis of Variance to compare the means of the 6 variables to the different groups of sports participation. For the variable with significance, Analysis of Covariance was used to control for the different groups and find differences amongst them.

Chapter 3- Results

Using the public use data set from the Add Health, I created a sub-dataset that filtered out missing cases. Table 1 provides a breakdown for some of the demographics of my sample. This breakdown includes many of the control variables including the differences in gender, age, race/ethnicity, sports participation, type of sport, and number of sports played.

Table 1: Demographics of Sample

Characteristic	N
Gender	
Male	2,150
Female	2,434
Age	
14 and younger	1,912
15-16	1,704
17 and older	968
Race/Ethnicity	
White	2,988
Minority	1,596
Sports Participation	
Not at all	1,288
1 or 2 times	1,251
3 or 4 times	905
5 or more times	1,140
Types of Sport	
No Sports	1,995
Individual Sports	465
Team Sports	1,329
Both Individual and Team	795
Individual Sport	
Swimming	230
Tennis	209
Track	604
Volleyball	385
Wrestling	186
Other	415
Team Sport	
Baseball/Softball	880
Basketball	1,077
Field Hockey	50

Football	630
Ice Hockey	83
Soccer	360
Number of Sports Played	
0	1,995
1-2	1,922
3 or more	694

Table 2 is the summary of the control variables by sports participation in the past week. Table 2 also shows the comparison of those who planned to participate in what type of sport with the amount of sports participation they reported in the last week. We can see that those who reported they would be playing team and individual sports had the highest amount of sports participation in the last week. The reverse of that is also true, those who did not plan on playing in any sports made up the largest group of no participation.

Table 2: Characteristics of Control Variables

Played an Active Sport	Not at all	1 or 2 times	3 or 4 times	5 or more times
Gender				
Male	403	491	505	751
Female	885	760	400	389
Race/Ethnicity				
White	789	844	623	732
Minority	499	407	282	408
Age				
14-	521	511	388	492
15-16	475	476	332	421
17+	292	264	185	227
Type of Sport				
No sport	806	617	310	262
Individual	141	128	85	111
Team	230	340	313	446
Both	111	166	197	321
Contact Vs. Non-contact				
Non-Contact	235	262	170	192
Contact	247	372	425	686

When we tested the hypotheses, we obtained mixed results. For Hypothesis One, participation in sports increases violent behavior, I find that participating in a sport, is significant for three of the four violent behavior variables. The only violent variable that is not significant is Using or Threatening to use a Weapon. The gamma scores for the violent variables are: Serious Physical Fight, .136, Seriously Injure Someone, .168, and Group Fight, .118. These are all weak relationships between sports participation and these violent behaviors.

Hypothesis Two, participation in sport increases non-violent behavior, has fewer variables with significance. Only Painting Graffiti and Damaging Property are significant with the independent variable, and they are also weak. Gamma scores for those variables are: Paint Graffiti, .092; and Damage Property, .134.

Hypothesis Three, participation in sport increases substance abuse, had only one variable with significance. The significant variable was smoking cigarettes, and it was found that those who did not participate in sports differ significantly from those who played 3 or 4 times, as well as 5 or more times. Those who play 1 or 2 times differ from those who play 3 or 4 times, as well as those who play 5 or more times. What we can see here is that individuals who participated in sports more often were less likely to smoke than those who only participated a few times a week or less.

Hypothesis Four, those who participate in team sports are more likely to be deviant, was found to not be significant. One of the most interesting findings

is that sports participation is related to violent delinquencies. This matches findings from other studies where those who participate in sports are more aggressive, take risks, and have dominating personalities (Eitzen 2012; Benedict and Klein 1997). This study differs from others when looking at the control variables. Those who did not play team sports were significantly more likely to get in a serious physical fight, seriously injure someone, participate in a group fight, and damage property. This contradicts findings of Stoll and Beller. The reason for this difference may be age. Stoll and Beller studied athletes in college while the current study used a sample consisting of individuals in high school or younger. Stoll and Beller also found that those who participated in a larger variety of sports were more likely to be deviant. This was not found in this study. When controlling for number of sports, I found no differences.

Hypothesis Five, older participants in sport will have higher rates of deviance, was also found to not be significant. The age control variable was another finding that differed from Stoll and Beller. This study found that the younger individuals were more likely to be delinquent. Depending on the variable, either those 14 and younger or the 15-16-year age groups were significant while the 17 and older group only was significant when it came to damaging property, but they were still less significant than the other age groups.

Table 3 illustrates the relationship between sports participation and various delinquencies. Model 1 consists of the variables measured using Pearson's Chi Square. Model 2 consists of the remaining variables that measured

using Analysis of Variance. The variables are broken down by the types of delinquencies for easy comparison.

Of the 19 dependent variables, only six were found to have any significant interaction with the independent variable. Getting into a serious physical fight, seriously injuring someone, participating in a group fight, damaging property, painting graffiti, and smoking cigarettes were all related to sports participation. Three of the four variables dealing with violent delinquencies were significant, while two non-violent variables and one substance abuse variable were significant. The results indicate that there is support for only part of hypothesis one. Participation in sport is related to a few variables of delinquent behavior.

Table 3: Test Scores for Dependent Variables

Variable	Model 1	Model 2
Violent Delinquencies		
Serious Physical Fight	44.454***	
Seriously Injure Someone	48.878***	
Group Fight	33.849***	
Use or Threaten Weapon	8.728	
Non-Violent Delinquencies		
Damage Property	26.889***	
Paint Graffiti	16.945*	
Steal < $50	15.728	
Steal > $50	14.790	
Shoplift	11.067	
Steal a Car	6.683	
Burglarize Building	6.157	
Substance Abuse		
Alcohol	23.654	
Cocaine	30.238	
Heroin	4.402	
Cigarettes		15.283***
LSD/PCP		1.192
Inhalants		.988
Chewing Tobacco		.506
Marijuana		.210

Significance * p<.05, **p<.01, ***p<.001

Participating in a Serious Physical Fight was related to the independent variable. The control variable for type of sport played indicates that those who do not play an organized sport are most likely to get into a serious physical fight. Controlling for race, minorities were more likely to get into a physical fight than Whites were. Males were more likely to get into a serious physical fight than women. The surprising finding was controlling for age, where it was found that the younger the groups were the more likely they were to get into a fight although literature suggests that should be reversed (Stoll and Beller 2000). Those that were younger than 14 were the most likely to get into a serious physical fight, while those 15-16 were also significantly correlated to getting into a fight, while those 17 and older were not found to be significant. When controlling for contact versus non-contact sports, I found that those who participated in contact sports were much more likely to participate in a serious physical fight.

Seriously Injuring Someone was also related to the independent variable. Those who did not play any sports were most likely to injure someone just like they were most likely to get into a fight. Both categories for race were significant, with minorities being more likely than Whites to seriously injure someone. Males had significant results when it came to seriously injuring someone. Age was interesting because the younger group was more prone to fighting, but the 15-16 year olds were more likely to seriously injure someone. There was no difference between contact versus non-contact sports.

Participating in a Group Fight was another variable related to the independent variable. Those who reported not playing any sport were the only group with significance when it came to Participating in a Group Fight. Both Whites and minorities were significant when Participating in a Group Fight, but minorities were still more likely than Whites to get into a fight. Males were significant while females were not. Similar to Seriously Injuring Someone, the 15-16 year olds were significant when it came to Participating in a Group Fight. The other age groups were not significant. When controlling for contact versus non-contact sports, I found those who participate in contact sports were more likely to participate in a group fight.

Damaging property was also related to the independent variable. Results show that those who participate in individual sports are most likely to damage property followed by those who do not play sports. Whites are more likely to damage property than minorities, but both groups have significance. Males were more likely to damage property. While all age groups are significant when damaging property, 15-16 year olds were most likely to damage property, followed by 14 and younger and then those 17 and above. Those who participated in non-contact sports were much more likely than those who played contact sports to damage property.

The other non-violent delinquency that was significant was painting graffiti. There were no significant groups when controlling for types of sport being played, gender, or age differences. Minorities were more likely to paint graffiti than their White counterparts. The only substance abuse variable that

had significance did not pass the Levene's Test of Equality of Error Variance for any of the control variables. Like damaging property, those who participated in non-contact sports were much more likely to paint graffiti than those who participated in contact sports.

When controlling for the number of sports that individuals played, those who participated in three or more sports were never significant. Those who participated in one to two sports were also never significant in the control. The group with the most significance were those who reported not playing or planning to play a sport at school.

The question about participating and planning to participate in specific sports can cause some concern. There are individuals who may report wanting to play a sport, but not have played it and skewed the numbers. To account for this, I ran my analysis again without those reporting no interest in playing. What I found were nearly identical results, with significance not changing on any of the original findings, so I have left out these results as they have nothing to add to this discussion.

What I have found is that sports participation is related to some forms of deviance. When it comes to violent behavior, the variables getting into a serious physical fight, seriously injuring someone, and participating in a group fight are all significant. For non-violent behavior, the variables damaging property and painting graffiti were significant. And for substance use, the only variable with significance is smoking cigarettes.

Chapter 4- Discussion

Some interesting findings resulted from this study. While the data contradicted many of my hypotheses and literature, it makes some important contributions to the field and could generate new hypotheses for future research.

The purpose of this study was to answer the question if participating in sports increase criminal or deviant behavior. The answer to this question is not simple. It was found that participating in sports is related to some criminal or deviant acts, but not all. In this study, violent behavior is significant. Three of the four variables measuring violence were significant; getting into a serious physical fight, seriously injuring someone, and participating in a group fight all had significance with participating in sports. While they had significance, all three were weak relationships. For non-violent behavior, only two variables had significance. Painting Graffiti and Damaging Property are both significant, with a weak relationship to the independent variable. Smoking cigarettes was the only variable in the substance abuse category to have significance with the independent variable, with those who only played a few times a week smoking more than those who had a lot of sports participation.

When controlling for type of sport played (team sports, individual sports, both team and individual sports, or no sports), it was found that those who did not play any team or individual sport were the most delinquent. When it came to contact versus non-contact sports, there were mixed results. When looking at violent delinquencies, those who participated in contact sports were more likely

to get into a serious physical fight, more likely to seriously injure someone, and more likely to participate in a group fight. For non-violent delinquencies, those participating in non-contact sports were more likely to damage property and paint graffiti.

The results are interesting when compared to the existing literature. Much of it contradicts the findings of Stoll and Beller, though this may be explained by differences in the study designs. According to Stoll and Beller, those who participated in team sports and those who played a larger number of sports were found to be more delinquent than those in individual sports and those who did not participate in sports. This study found that those in team sports were typically lower in their delinquent activities than those in individual sports and those who were not involved in a sports team. Those who participate in team sports were more delinquent than those on individual sports and those who played both types on two occasions (participating in a fight and participating in a group fight). For the other three variables (painting graffiti, damaging property, and seriously injuring someone) those who participated in team sports were the least likely group to be committing these delinquencies.

Stoll and Beller found that age is important and that the longer an individual is in sports, the more likely they are to be delinquent. This was not found in this study. Those who were younger (14- and 15-16 year olds) were more likely to be delinquent compared to those who were older (17+ years old). The relation between number of sports being played and deviance also differed from Stoll and Beller. In this study, individuals who played 3 or more sports

were less likely to be delinquent than those who played 1-2 sports, and those individuals were less likely to be delinquent than those who don't play on any sports teams. The work of Stoll and Beller has contributed greatly to knowledge about moral reasoning and moral development of athletes. However, their studies focused on hypothetical situations that athletes could find themselves in. While the athletes may report they would act in a certain way, they could act differently if the situation ever arose. Also, Stoll and Beller surveyed athletes in college. These athletes are different in two important ways: they are older and they are top athletes. They most likely have played, probably also multiple sports, for a long time at an elite level to get to play at college. They have been standout athlete in high school. The youth participating in sports in our sample might not have even played on varsity teams.

When it came to substance abuse, the surprising finding was that only cigarette smoking was significant. Alcohol abuse amongst athletes is a major concern, as many studies have found high school athletes are at considerable risk for alcohol use (Leinfelt and Thompson 2004; Panhandle Prevention Coalition 2010; Denham 2014). Marijuana and pills are also often used substances that were not significant in this study. I believe that some of this may be from not wanting to report use of illegal drugs for fear of punishment.

The individuals who committed violent delinquencies are those who are participated in contact sports. The work of Bourdieu can explain how a certain habitus learned in contact sports could contribute to the higher rate of violent delinquencies. Aggressive and violent behavior on the sports field is desired and

athletes who exhibit these behaviors are valued – they have the needed capital and habitus for this field. Other desired traits like competitiveness are also learned and valued on this field. But, athletes may take this competitiveness, aggression, and violence to different fields which can result in fights, both individual or group fights.

Bourdieu's work may also explain why those who participate in individual sports may be committing more crime than those in team sports. Individual sports participants were significant in violent delinquencies, except when it came to a group fight where those in team sports were significant. This could be because individuals in team sports are used to being part of a team or group, so they are likely to back one another and could be hanging out in groups. Those in individual sports are used to doing things on their own and are used to compete in one-versus-one situations.

Bourdieu's work may also explain some of the differences in findings compared to more recent data. For example, this study used data from the 1990s. Individuals in sports may have had a different sports habitus than they do now. There could also be class differences between this data and studies with more recent data. While the ADD Health is a representative sample of its time, current studies may not be based on a nationally representative sample, and class values have changed in the last 20 years. The inherent qualities of sport may also have changed; we can see a difference in how certain sports are played from the 1990's to the 2010's. For example, soccer and basketball have much more contact and this could be changing the mentality of those who are

participating in those sports now compared to those who played 20 years ago. We must also acknowledge the differences in sports culture. Sports today place more emphasis on playing one sport and has become more competitive at increasingly younger ages with hopes of college scholarships and fame. The habitus for sports from 20 years ago thus may not be the same sports habitus today. Athletes had to change the way they act and interact in order to stay in the field. There is more competitiveness now with a greater focus on specialization in a sport, on playing year round, on earning scholarships, and prestige (O'Sullivan 2014). Children are put under pressure to live up to the standards of their parents and coaches. If one does not specialize in a sport they have the chance to be passed up for somebody who spent more time and money in order to get ahead (O'Sullivan 2014). This increased competitiveness could make a difference in how individuals act compared to 20 years ago.

Social Learning Theory can be used as a possible explanation of the findings. I believe that the results do indicate there is learning of particular behaviors. We find that the violent delinquencies are significant, and the two non-violent variables that are significant could be connected as well. Both damaging property and painting graffiti are acts that may be more spontaneous, but are also destructive behaviors, much like getting into a fight. I believe that these behaviors are related to the violent delinquencies and that they may be learned from behaviors that are desired in sport.

It could be theorized that these individuals are learning certain behaviors in sports, from coaches, from peers, or from athlete role models, and that these

influences affecting their life choices. To better test this theory, a study needs to be designed with questions about what coaches, parents, or other players do and say about breaking rules.

Participating in sports is related to a few forms of violent behavior and non-violent delinquency. Some results were a surprise. Based on the literature, we expected to find significance in a few areas that were not found. While some of my findings seem to contradict existing studies, I am not ready yet to refute or support their work. I think the best course of action is to utilize my findings and to conduct future studies that have fewer limitations. It would be interesting to see this same study with more recent data in order to get a better idea of what it is like to participate in sports today.

There are limitations to this study. The first that must be brought to attention is the data set. The Add Health data set is fantastic for study of adolescents. It is a nationally representative sample and has been utilized in thousands of studies. The problem is that the focus of the Add Health is on health and reproductive behavior. There are a lot of questions about daily activities, but there are only a few questions on physical activity or deviance.

The independent variable in this study is based on activity of individuals in the past week. Those who are not in season for sport have no scheduled games or practices, or are sick or injured may not have been active in a sport. The alternative may also be true; an individual who participated in a pickup game with friends in the past week reported more activity than they might typically engage in.

Self-report data from adolescents could also create some issues of validity (Barker, Pistrang, and Elliott 2015). Validity issues arise from deception, inaccurate recall, or misunderstanding of the question (Barker, Pistrang, and Elliott 2015). In large studies we can hope that inaccurate recall and deception from individuals average out to a correct response, but that is not a guarantee. Youth may also have a harder time understanding what is being asked, leading to inaccurate results.

Another limitation to this study is that it is from 20 years ago. The 1990s were a different world when it came to youth sports as discussed above.

Of course, the question about participation in sport could be the most limiting factor. Sports participation in the Add Health was simply to know if the kids are active for health reasons. To compare it to the study from Stoll and Beller, information about the level of sport, the level of organization, and years playing sport would all need to be included for a better comparison.

One reason that the level of play would be interesting is when we look to those who are participating in sports activities, but do not play on any team. There are individuals who are active in sports but choose to play with friends or pickup games. Delinquent activities that would prohibit them from playing in organized sport.

While there are a number of limitations to this study, there are findings that are worth noting for future research. The first is that there is a connection between violence and participating in a sporting activity. This should be developed further to look for differences between the specific sports, such as the

differences between football, basketball, etc... Also to note is the rise of both female sports and the delinquency rate of females. While we have data for 1996, I believe that the rise in both female sports participation and in female offending rates would lead us to see different results from what this study has found.

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APPENDIX

Appendix A: Code Book

Variable Name	Variable Description
Serious Physical Fight	In the past 12 months, how often did you get into a serious physical fight?
Seriously Injure Someone	In the past 12 months, how often did you hurt someone badly enough to need bandages or care from a doctor or nurse?
Use Weapon	In the past 12 months, how often did you use or threaten to use a weapon to get something from someone?
Group Fight	In the past 12 months, did you take part in a group fight?
Paint Graffiti	In the past 12 months, how often did you paint graffiti or signs on someone else's property or in a public place?
Damage Property	In the past 12 months, how often did you deliberately damage property that didn't belong to you?
Steal Something	In the past 12 months, how often did you take something from a store without paying for it?
Steal Car	In the past 12 months, how often did you drive a car without the owners permission?
Steal >$50	In the past 12 months, how often did you steal something worth more than $50?
Steal <$50	In the past 12 months, how often did you steal something worth less than $50?
Burglarize	In the past 12 months, how often did you go into a house or building to steal something?
Cigarettes	During the last 30 days, on how many days did you use cigarettes
Chewing Tobacco	During the last 30 days, on how many days did you use chewing tobacco or snuff?
Alcohol	Over the last 12 months, on how many days have you gotten drunk?
Marijuana	During the last 30 days, how many times have you used marijuana?

Cocaine	During the last 30 days, how many times have you tried any kind of cocaine?
Inhalants	During the last 30 days, how many times have you used inhalants?
LSD/PCP	During the last 30 days, how many times have you used any illegal drugs (LSD, PCP, Ecstasy, mushrooms, speed, ice, heroin, pills)?
Sports Participation	In the last 7 days, on how many days did you play an active sport?
Age	How old are you?
Race	Race-Interviewer Observation
Gender	Biological Sex
Type of Sport	Type of Sport Played
Number of Sports	Total Number of Sports Played