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## **Tackled in the Red Zone: The Impact of Race on Football Card Values**

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## Abstract

This paper examines the effect (if any) of the race of football players on the value of their "rookie" football cards. While studies have examined the impact of race and the value of baseball cards, to date research has not investigated the role of race on card values in football. Data were derived from 148 black and white football players who are members of the NFL Hall of Fame. All players in the sample started their careers after professional football became racially integrated. Data for each player's race, value of their rookie card, card availability (scarcity), card vintage, performance, and position were obtained from secondary sources. The principle findings include that when controlling for factors such as position, performance, vintage, and card scarcity, a player's race has no effect on the value of the rookie cards of NFL Hall of Fame members. Speculations on the absence of racial bias and suggestions for future research are offered.

The collecting of valued items goes back at least to the 5<sup>th</sup> century B.C. with the discovery of a collection of seal impressions (Rigby and Rigby, 1944). Who collects, what is collected, how items are valued, and the instrumental and expressive meanings of the items for collectors has only recently become the subject of serious study. For example, McIntosh and Schmeichel (2004:87) describe four types of collectors. The *passionate* collector collects from emotion and his or her obsession may lead to paying irrationally high prices. *Inquisitive* collectors, on the other hand, tend to rationally collect items as future investments. The *hobbyist* collector seeks out and purchases items out of enjoyment. Finally, *expressive* collectors develop collections that reflect who they are; their collecting is a matter of self-expression.

The items people collect are as varied as the people who collect them. Collections can be as simple as pressed wildflowers, matchbooks gathered in the course of one's travels, or newspaper clippings about one's hometown. They can also be elaborate and expensive, such as collections of stamps, coins, art, or classic automobiles. Regardless of the objects collected, collectors often feel a deep personal connection and emotional involvement with their collections (Danet and Katriel, 1989). Social scientists have discovered collecting, not only because the nature of collecting is intrinsically interesting, but as a means to gain insights into human behavior. Research results on collecting behavior from varied disciplines began to appear in the mid-1980s (e.g., Belk et al., 1988; Fine, 1987; Robinson, 1987; Spooner, 1988; McIntosh and

Schmeichel, 2004). These studies have helped to legitimize research on collecting as a worthwhile academic pursuit (Regoli, 1991). The study of people and their collections suggest a variety of directions for research, including inquiry into the relationship between people and their things, or *material culture* (Csikszentmihalyi and Rochberg-Halton, 1981). The collections we examine in this paper are those of football cards, a prominent piece of the material culture for millions of people in the United States.

## A Brief History of Football Cards

Football cards first appeared in the latter part of the nineteenth century. Tobacco companies started inserting them into packs to protect cigarettes during shipping. Each cardboard piece had advertising on one side and the picture of a popular actor on the reverse. The tobacco companies soon realized the advertising potential of the cards and began to include pictures of other celebrities of the day, such as “boxers, pool players, singers, and vaudeville stars...,” but it was the cards featuring sports stars, particularly baseball players, that became the most coveted among young collectors (Bonner, 1995:12).

Goodwin and Company issued the first football card in 1888. Pictured on the card was Henry Beecher, the captain of Yale’s varsity team. The Mayo Cut Plug tobacco company issued the first complete football set in 1894. It contained 36 cards featuring college stars from the powerhouse football schools of that era--the Ivy League’s “Big Three”: Harvard, Princeton, and Yale (Bonner, 1995:11-12).

The next major football cards to be produced, however, did not appear nationally until 1933, when the Goudey Gum Company released a multi-sport set, the *Goudey Sport Kings*, which included cards of Red Grange, Knute Rockne, and Jim Thorpe. In 1935, a 36-card set was issued by the Chicle Gum Company that featured “pro football players like Bronko Nagurski, Dutch Clark, Beattie Feathers, and Bernie Masterson...Sport Kings and National Chicle cards have between them six of the ten most valuable football cards on the market today” (Bonner, 1995:2). In 1948, two companies issued football card sets sold in packs with bubble gum. Bowman issued a 108-card set, while Leaf introduced a 98-card set of hand-colored cards. Then in 1950, the Topps Gum Company joined the competition, issuing a set of 100 college football players, the *Topps Felt Backs*, so named because the back of the cards were made of felt and depicted a college pennant. In 1951 Topps produced its second major college football issue, called the “Magic” set. On the back of each card was a scratch off section which gave the answer to a football quiz.

Although by the late 1940s and early 1950s, football cards had come into their own,

with sets being produced annually, they clearly lagged behind the popularity of baseball cards. The reasons for the relative absence of football cards compared to baseball cards during the first half of the twentieth century are unclear, but speculations can be offered. One explanation was the relative popularity and age of the two sports. Baseball was generally accepted as “America’s Pastime” and professional baseball had existed in the United States since 1845, with the game dating back to 1825 (Sullivan, 1997). College football only dates back to the early 1880s. Harvard, Yale, Princeton, and Pennsylvania dominated college football in the late 1880s and 1890s, but schools around the country were rapidly adding the sport (for example, Notre Dame in 1887 and Southern California in 1888). Athletic clubs, which emerged after the Civil War, were also fielding football teams and many of the teams began to recruit players from college teams. For example, in 1891, the Chicago Athletic Association football team was largely drawn from the University of Chicago football team. Semi-professional teams began to emerge throughout the mid-west around the turn of the century. There was, however, no professional football equivalent to baseball until the National Football League (NFL) was founded in 1921 (Bonner, 1995:2). Professional football and football card collecting suffered a setback as the NFL was gaining in popularity in the late 1930s and early 1940s. The outbreak of World War II led to the enlistment or drafting of millions of young men in the United States. The war not only took “the best players,” it also took coaches, promotional personnel, and fans away from the game. It is thus not surprising that no football cards were printed during the war years.

It was not until 1948 that professional football cards started to be regularly produced, with both the Bowman and Leaf companies distributing NFL sets (Bonner, 1995). Leaf continued production of cards for one more year making the only major card set in 1949. Bowman resumed card production in 1950 and continued through 1955 (Bonner, 1995; Zillante, 2003). In 1956 the Topps Chewing Gum Company captured the totality of the football card market when it purchased the Bowman Company and successfully negotiated with the NFL for the rights to produce football cards (Bonner, 1995). Topps effectively established a monopoly in the football card market until Fleer came on the scene in 1960. The Topps-Fleer rivalry lasted only four years, but Fleer was never very competitive because Topps had obtained exclusive licenses with most of the major players in the NFL. The contest between these two companies ended not because Topps outperformed Fleer, but because another company entered the football card fray. In 1964 the Philadelphia Gum Company produced its first set of NFL cards. This new company outbid Topps for the NFL license, and, having nowhere else to go, Topps then outbid Fleer for the AFL license (the American Football League having been formed in 1960 and subsequently absorbed into the NFL in 1970). This effectively shut Fleer out of the major football card market for the next 26 years (Bonner, 1995:48).

Philadelphia and Topps managed to vigorously compete until 1968, when the competition ended. Topps emerged victorious and established a monopoly on the football card market lasting through 1988.

The eventual end of the Topps monopoly in the football card market was spurred by two primary factors: (1) a successful anti-trust suit filed by the Fleer Corporation, which halted Topps' 25-year monopoly (1956-1980) in the baseball card market, and (2) greed. Both NFL owners and players decided it would be more lucrative if they allowed more than one company to produce football cards (Bonner, 1995:64). The players and owners were right. The end of the Topps monopoly led to an era of unprecedented growth in the hobby. The number of companies fielding major football sets jumped from one (Topps) in 1988, to four in 1989, five in 1990, and *fifteen* in 1991 (Bonner, 1995).

## Collecting Cards

People collect cultural artifacts for different reasons. One elderly woman's collection of seashells may be a reminder of childhood summers spent with her grandparents in Nags Head, North Carolina. A middle-aged businessman's beer can collection could take him back to his relatively carefree college days when status was measured not in terms of dollars and cents, but in how tall your pyramid of empty beer cans would get. Seeking out and purchasing a fine work of art may be an expression of a college professor's "excellent taste or appreciation for culturally valued artifacts" (McIntosh and Schmeichel, 2004:92). Of all the items people collect, sports memorabilia tops the list, and sports cards, led by baseball cards, are the most widely collected item of sports memorabilia (Hewitt et al., 2005).

Why do people collect small pieces of cardboard with pictures of sports figures printed on them? They are very accessible and generally inexpensive; they often rekindle fond memories from childhood or late adolescence; and they have the potential for being a significant financial investment. Furthermore, "collectors can learn interesting facts, make money, and have something to talk about. The hobby even gives people somewhere to go on the weekends" (Bonner, 1995:5). While there may be debate over whether football has supplanted baseball as America's "favorite" sport, there is no doubt that the Super Bowl is the most watched event on television every year, attracting audiences around the world.

McIntosh and Schmeichel (2004:93) suggest that many people's collections "serve as a link to the collector's past. People often collect objects that are related to their past, and especially to their childhood....This sort of collecting facilitates reminiscences

about the past, and typically the memories that surface are positive goal-related experiences.” Many types of collecting also serve to educate children about the history of particular parts of the larger culture. For example, stamp and coin collecting can be a part of a larger understanding about the nation’s history, model airplane and ship collections can carry with them knowledge about earlier 20<sup>th</sup> century warfare. And, as Robert Fitts (1994:76) suggests, “baseball cards probably educate a young fan about the game’s history more than books, sports announcers or parents.”

Collecting football cards can be one such “living” link to our past. Although Joe Montana may have thrown the pass, Dwight Clark made “The Catch” that beat the hated Cowboys and vaulted the 49ers to Super Bowl XVI. Colts fans, even those too young to have seen him play, can picture Johnny Unitas with his signature crew cut, black high-tops, and icy stare while he surveyed the field in front of him. And no one will forget Unitas’ counterpart in Super Bowl III--Joe Namath: a brash, young, wild-haired upstart, predicting a Jets’ victory over the heavily favored Colts. A Barry Sanders card could easily elicit one of a hundred moments frozen in time when he seemingly defied the laws of physics, making one or more defenders look like mere children grasping at thin air as he twisted, turned, and ran toward the end zone.

Because collections of any sort are often very personal, possibly even reflecting the personalities of collectors, when we study individual collections we can learn about individual collectors. By studying collecting in the aggregate and the cards that are collected, including the most sought after or most valuable cards, we can gain insights not only into what individual collectors value, but what the larger society appears to value (Regoli, 1991). Why is one card more highly prized over another? What determines a card’s value to collectors? Certainly factors such as card condition and scarcity, the player’s status and achievement, age, or vintage, of the card, or whether or not the card is from the player’s rookie year affect any particular card’s value. But other factors might also influence which cards become more sought after and valued. In this paper we explore the subtle role that *racial bias* might play in the social activity of sports card collecting. Specifically, we are interested in determining whether the race of football players affects the value of their cards. If race does affect card values, just exactly how does it do so?

## **Race and the Evaluation of Professional Athletes**

A recent past-president of the American Sociological Association, Joe Feagin, claims that the United States is a *totally* racist society (Feagin, 2000). He suggests that racism is part of the air we breathe and so thoroughly permeates all aspects of

American culture that many of its forms are simply taken for granted or dismissed as “the natural order of things.” Similarly, Eduardo Bonilla-Silva (2003) describes the manner in which “racist” remarks, comments, and beliefs are rather nonchalantly and commonly dismissed, referring to these discursive techniques as a “new racetalk” or racial ideology. This new racial ideology aids in reproducing white supremacy while (seemingly) absolving the ideologue of racist wrongdoing (Bonilla-Silva, 2003). The institutional and structural forms of racism are denied or unrecognized, and racism becomes narrowly and inaccurately defined as the overt acts of the Ku Klux Klan or racist skinheads. By their very nature, more subtle and covert forms of racial bias are typically unrecognized. However, because they make up most of the racism within society, they are no less harmful and may be much more insidious than the overt forms we can all see, recognize, and condemn.

Lettie Gonzalez and E. Newton Jackson (2003) found that subjects tended to attribute the success of white athletes to socioeconomic factors while black athletes’ success was attributed to physiological factors. In a study involving media portrayal of athletes, Gabriel, Johnson, and Stanton (1999:1334) reported that white players who have “off-field problems or (miss) practices, might be called ‘fun-loving’, ‘free-spirited’ or ‘independent,’ whereas a black player with similar behavior might be dubbed ‘uncoachable’, ‘temperamental’ or ‘disruptive.’” Arthur Evans (1997) has added that black players were more likely to be seen as arrogant or insolent by teammates and white coaches than were white players.

Perceptions of black players’ abilities are also influenced to the extent they are subject to “stacking,” that is, limited to certain positions (Coakley, 2003). Studies have reported that whites are disproportionately placed, and black players underrepresented, in key functionary or central positions that, because of their critical role, have a greater impact on the outcome of a game. These positions allow the greater display of intelligence, decision-making skills, coordinative tasks, social interaction, group acceptability, leadership—in football, the center, quarterback and middle linebacker positions; in baseball, pitcher and catcher positions; and, in basketball, the point guard position (Jibou, 1988; Frey and Eitzen, 1995; Lomax, 1999; Ogden and Hilt, 2003). Conversely, these studies found that blacks are overrepresented in positions requiring more physical skills such as speed and quickness—in football, running back, receiver and defensive line positions; in baseball, the outfield positions; in basketball, the forward position. Given that key positions have a greater outcome on the game, the limited access of black players to these positions plays a part in the evaluation of the significance of their contribution to a team.

Much of the research in this area has focused on baseball. In the voting of minority

players into the professional baseball Hall of Fame (HOF), Brown and Bear (1999:420) found that between 1952 and 1987, “white players were overrepresented in the central positions (pitcher and catcher), and black players were overrepresented in the peripheral positions (the outfield).” These findings are significant because a player’s position, such as pitcher, is associated with a greater likelihood of being elected to the HOF. For example, of the players who entered the HOF (elected and put in by the Veterans Committee) since 1936, a disproportionate number of these players (59 of the 189 or 31 percent) are pitchers (Thorn et al., 2001:224).

Black players may also face discrimination in getting into the HOF. Findlay and Reid (1997), for instance, found that black players were less likely to receive votes in both the nomination and ballot process. Desser, Monks, and Robinson (1999) found a preference for nominating white players and a voting bias against black players who made it on the ballot. Yet, despite performance indicators, Findlay and Reid (1997) found black players had a lower probability of being elected to the HOF, controlling for other relevant factors. Desser et al. (1999:88) also found evidence of the significantly superior performance of black baseball nominees relative to white nominees: “African American outperformed whites in batting average, runs produced, lifetime batting average over .300, and stolen bases....In no category did white nominees significantly outperform African American nominees. In fact, the sample of eligible African Americans not nominated had a higher mean lifetime batting average than the white nominees.”

Other researchers have reported contradictory evidence on admission into the HOF. For example, Jewell, Brown, and Miles (2002) found little evidence of bias in voting for the Hall. They note that although “retired players who were born in Latin American countries receive fewer votes on their first ballot,” the differences were likely due to specification factors rather than ethnicity. In addition, they found no significant bias in voting against black nominees. To the extent bias is found, “it appears that any discrimination in voting is concentrated among those players who would not have received enough votes to enter the Hall based solely on their career statistics” (Jewell et al., 2002:172). In addition, Jewell (2003) found no evidence of racial or ethnic bias in the timing of election into the HOF. Jewell examined all players (N=309) on the ballots between 1962 and 2001 (excluding pitchers due to lack of comparability with non-pitchers). Half of the 33 players elected to the Hall during these years were black, 45 percent were white, and six percent were born in a Latin American country. According to Jewell (2003:94), for players elected into the HOF, “white players wait an average of 3.9 years, black players wait an average of 1.1 years, and Latin players wait an average of 6.5 years.”

It is widely known among social scientists that perceptions affect interpretations and

evaluations of the performances of black and white athletes (Regoli, 1991; Helmrich, 2004). For example, when Joe Montana won a Super Bowl his “field generalship,” or ability to recognize and exploit the weaknesses of the opposing defenses, was emphasized--he was smart and used his head to triumph. In contrast, discussions surrounding Doug Williams, the first, and to date the only, black quarterback to win a Super Bowl, focused on his grit, determination, physical prowess, and playing through pain and adversity. Is this more subtle form of racism also reflected in the collecting of sports cards?

## **Race and Card Collecting**

Research findings in studies of card value and race are mixed. Some research reports collector bias in the valuing of cards of black and Hispanic baseball players (Nardinelli and Simon, 1990; Andersen and LaCroix, 1991; Gabriel et al., 1999; Fort and Gill, 2000). Other research appears to find minimal or no racial bias (Regoli, 1991; Messitte and Powell, 1995; Hewitt et al., 2005). In addition, Stone and Warren (1999) found an absence of bias in their study of basketball trading cards. To some extent these disparities are a result of different samples and methodologies. For example, while Gabriel et al. (1999) examined only rookie cards produced by Topps between 1974 and 1982, Fort and Gill (2000) analyzed all player cards produced by Topps in 1987, Stone and Warren (1999) studied the cards of all players in the NBA who were active players during the 1976-77 season and who had retired by 1993, and Hewitt et al. (2005) examined a sub-sample of rookie cards of members of the baseball HOF. The inclusion of particular independent variables also varies, with some studies using measures of performance, while others do not. Finally, race of player is not as self-evident as one might think. For example, no player card specifically identifies the race of the player. To solve the problem, some researchers, such as Fort and Gill (2000:25) developed a continuous, market participant measure of race reflecting “an average race/ethnicity score (between 0 and 1) for each player. Other researchers used a more traditional approach of measuring race as discreet variables using photo identification from player cards (Regoli, 1991; Brown and Bear, 1999; Regoli et al., 2004; Hewitt et al., 2005).

The possibility of racial bias in football card collecting and its impact on player card value is the focus of this paper. It is doubtful that collectors would choose a John Riggins card over an Earl Campbell card, or visa versa, simply because Riggins is white and Campbell is black. However, just as blacks and whites in the general public are evaluated differently, black and white athletes are not evaluated the same and presumed “objective” assessments can actually be quite “subjective” (Regoli, 1991;

Wanderer, 2003). Thus, the research question and focus of this paper is whether football player's race affects the value of his card relative to those of his peers?

## Methods

Data were derived from four sources: (1) Beckett's Sports Cards website (2005), (2) the Professional Sports Authenticator (PSA) website (2005), (3) Clary, Himmelman, and Schwartz's, *Topps Football Cards: The Complete Picture Collection* (1986), and (4) the Pro Football Hall of Fame website (2005).

### The Sample

By 2005, 229 players, coaches, or other contributors to the game had been inducted into the Football Hall of Fame. Because one of the factors likely to affect card value is the skill and performance of the player, we chose to focus on members of the HOF because it could appropriately be assumed that, based upon their membership, they are the best to have ever played the game. A 39-man Board of Selectors ultimately determines election to the HOF. These Selectors are comprised of one media representative from each city that has a pro football franchise (there are two representatives from New York which has two pro teams), one representative from the Pro Football Writers of America (PFWA), and six at-large representatives. Since 1970, the Selectors meet before the Super Bowl each year and choose from the "final roster"<sup>1</sup> of candidates those who will be enshrined into the HOF. A candidate must receive at least 80 percent approval from the Selectors in order to be elected. Our sample consisted of black and white HOF players who started their careers between 1946, when the NFL became integrated, and 1988, when the "Topps era" of football cards ended.<sup>2</sup> Of the current 229 HOF members, 81 were omitted from this study.<sup>3</sup> Consequently, the final sample consisted of 148 players, 90 whites and 58 blacks.

### The Variables

Six variables were used to examine the possibility of racial bias in card values. The dependent variable is card value, while the five independent variables are race of player, availability of card, card year, performance of player, and position of player.

1. **Price:** Card value is measured in dollars. This variable was obtained from the prices listed on Beckett's Sports Cards website, *Price Guide* section, for the "rookie"<sup>4</sup> cards in

near-mint condition<sup>5</sup> for the 148 players in the sample.

2. **Race:** Determined by a visual inspection of each player's photograph as it appears on the HOF website and in *Topps Football Cards: The Complete Picture Collection*. The players were divided into black ( $n = 58$ ) and white ( $n = 90$ ) subcategories. (For a discussion of the procedures used to determine a player's race, see Brown and Bear [1999]).

3. **Availability:** A card's value is affected by its scarcity. However, card companies do not publish data about their production numbers for any specific year. Therefore, we approximated the availability of cards through the population reports published by the PSA and Beckett's websites. Each month, PSA and Beckett report the number of specimens of a card and the conditions in which they exist. Using this information, we constructed a measure of availability based on the number of rookie cards of each player that were reported to exist in near-mint to mint condition.<sup>6</sup> In its original form this variable was highly skewed (mean = 294.81, median = 56.5), therefore we created a categorical variable with two categories: high availability ( $n = 74$ ) and low availability ( $n = 74$ ). The high category included cards with 57 to 10,647 known specimens and the low category had cards with 0 to 56 known specimens.

4. **Vintage:** The year a card was produced could affect the value of that card. Certainly, older cards as compared to newer cards are rarer because over time specimens are lost or damaged, and cards were produced in fewer numbers when the hobby was in its infancy (Williams, 1995; Bloom, 1997). Nevertheless, all other factors being equal, it is possible an older card might be more highly coveted by collectors than a newer specimen for the simple reason that it is "old." Older collectors with greater discretionary money to spend on such items may be willing to pay more for cards from their childhood and younger collectors may attach greater value to the older cards of players who are now the "legends" of the game.

5. **Performance:** It is reasonable to assume the players in our sample are among the best to have played the game, although their contributions to the game are not identical or equal. Developing a measure of performance for HOF football players is much more problematic than it is for HOF baseball players due to the more extreme differences in the roles demanded of different positions. For this study we constructed an indirect measure of performance called "finalist" based on the number of times a player was on the final ballot before being inducted into the HOF.<sup>7</sup> For example, it is presumed that a player who is a first ballot inductee had a more stellar career and made a more significant contribution to the game than a player who was on the final ballot 10 or more times before his induction (see Jewell, 2003). This is an imperfect measure of performance inasmuch as it may be contaminated by multiple issues,

including racism. However, other measures of performance, such as listings compiled by experts identifying who are the best players to ever have played the game, confirm our use of this indicator of performance (Carroll et al., 1999).<sup>8</sup>

6. **Position:** Although football is a team sport, some positions are more important or valuable than others. On offense, for example, the quarterback touches the ball on nearly every play, calls the play in the huddle, and might change the play at the line of scrimmage. Quarterbacks of mediocre talent can be "bigger" stars on the team and have higher status than a very talented offensive or defensive lineman. Since this "star quality," based on player's position, might affect the value of a player's card we included each player's position in the analysis.

## Analysis and Findings

The dependent variable price was log-transformed because of its skewed distribution. All logarithms carried out for analysis were to the base  $e$  (i.e., natural logarithms). Log transformations are often applied to monetary values, especially in the field of econometrics. The residuals of the regression model described below are approximately normally distributed, which indicates that the appropriate transformation was applied.

Figure 1 displays the number of Hall of Fame players broken down by position and race (white/black). The positions are running back (RB), quarterback (QB), wide receiver (WR), tight end (TE), offensive lineman (OL), defensive lineman (DL), linebacker (LB), and defensive back (DB). Whereas there are more black HOF players at the positions of running back and defensive back, there are more white HOF players at the positions wide receiver, offensive lineman, defensive lineman, and linebacker. There currently are *no* black quarterbacks in the HOF.

**Figure 1: The frequency of players broken down by position and race.**

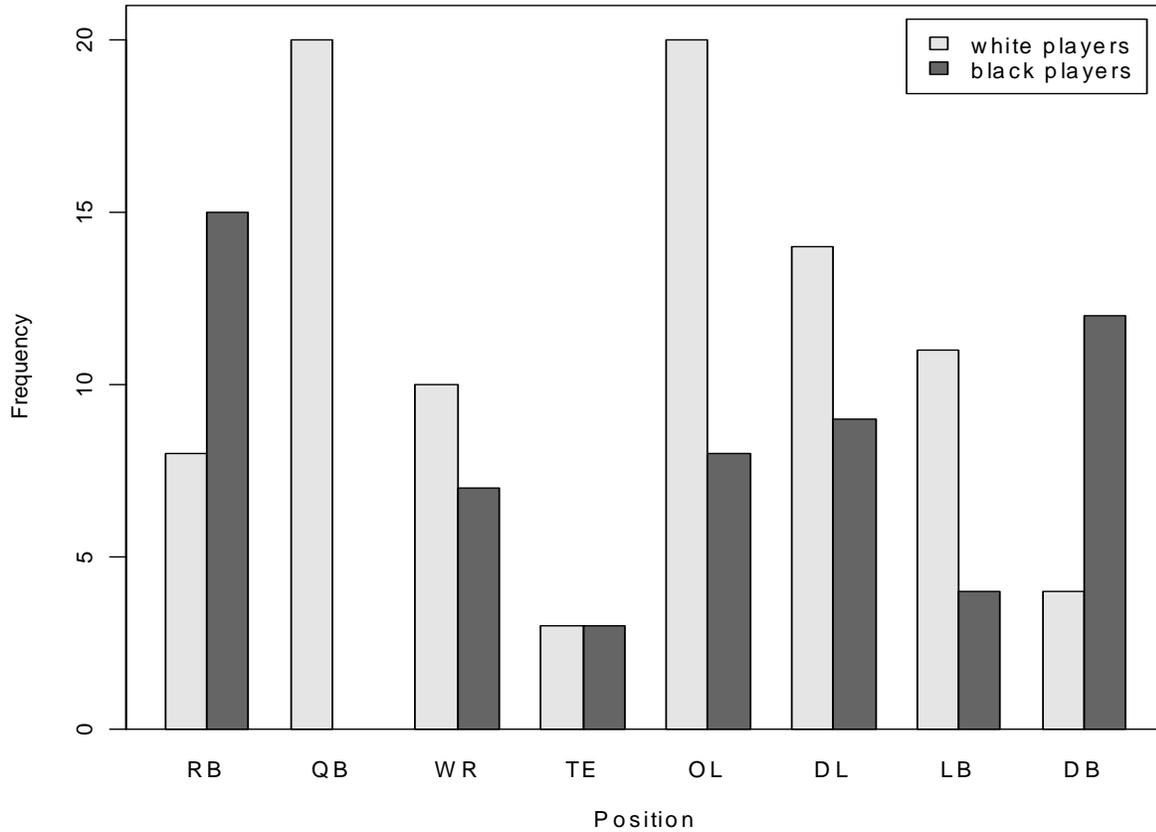
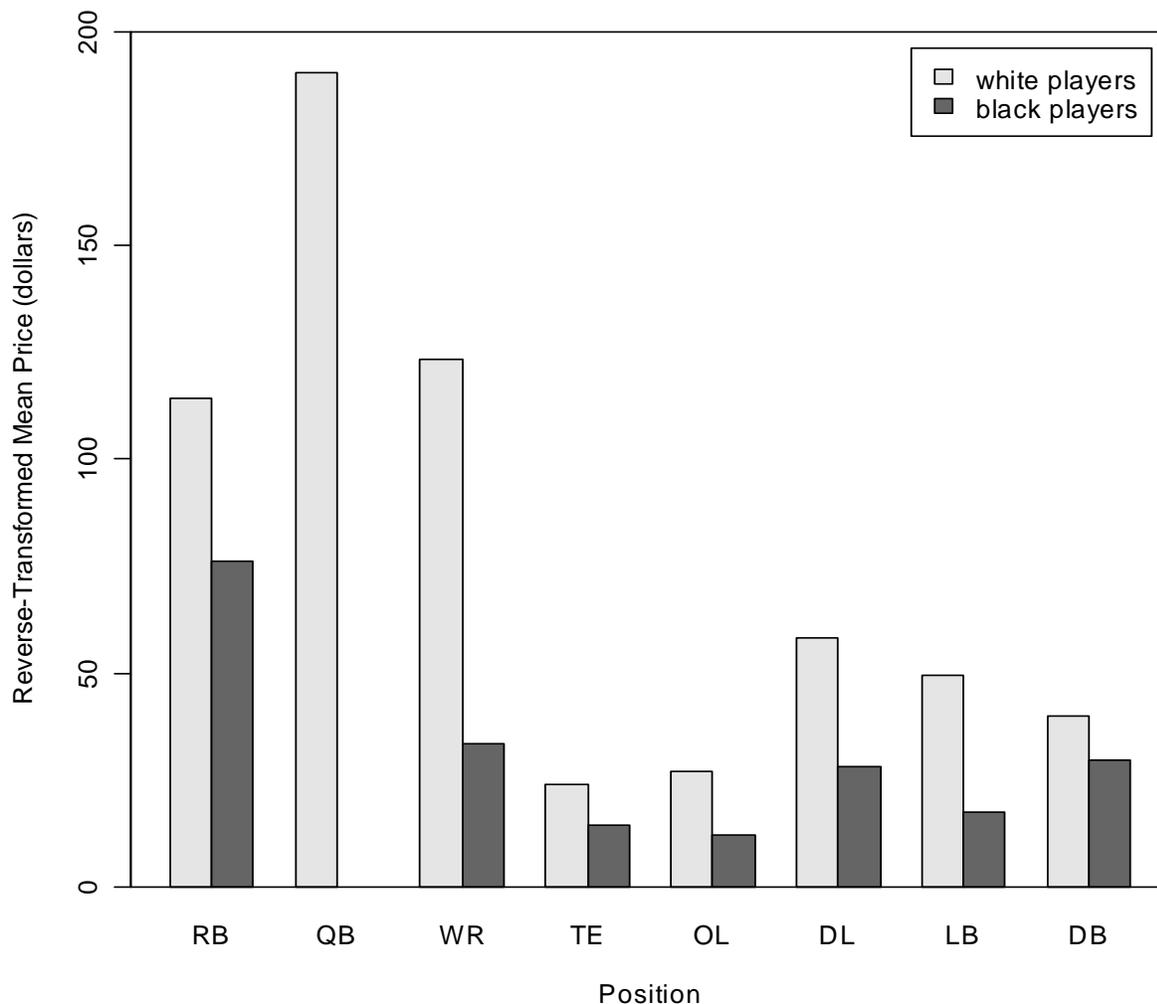


Figure 2 displays the reverse-transformed mean price of cards as a function of position and race for the same HOF players. On average, the cards for quarterbacks are valued the highest--close to 200 dollars. The cards for running backs and wide receivers also have high average value, except for the cards of black players at those positions, which are valued at less than 100 dollars. Note that for *all* positions, the mean reverse-transformed price is lower for the black players.

**Figure 2: Reverse-transformed mean price in dollars as a function of position and race.**



Perhaps, the most striking finding apparent in Figures 1 and 2 concerns the position of quarterback. The cards for quarterbacks are on average valued much higher than are the cards for players at other positions, but to this date there is not a single black quarterback in the HOF. This finding might provide *prima facie* evidence of racial bias. However, the collectors of cards may not necessarily share such bias because the position of quarterback is uniquely important to the game of football, as discussed earlier.

The dependent variable log-price was regressed onto availability, log-finalist, position (coded as a nominal variable), race, and vintage. The variable finalist was log-

transformed because of its skewed distribution. Counts are often log-transformed with the goals of stabilizing variance and increasing linearity. This goal was only partially achieved for the variable finalist because more than half of the players were inducted into the HOF on the first vote, which meant its distribution is unavoidably skewed.

The additive regression model included the predictor variables availability, log-finalist, vintage, position, and race. The regression coefficients for this model appear in Table 1. Note that position was coded with dummy, or indicator, codes and that Offensive Linemen, the largest position category, served as the reference group (see, e.g., Fox, 1997). The multiple  $R$  squared for the analysis is 0.705. The standardized coefficient for availability is 0.183 which does not differ significantly from zero,  $t = 1.243$ ,  $p = .216$ . The slope for log-finalist is -0.205, which does differ from zero,  $t = -2.05$ ,  $p = .012$ . Position also has a significant effect on price. All positions, with the exception of tight ends ( $t = 1.308$ ,  $p = .193$ ) and defensive backs ( $t = 1.772$ ,  $p = .079$ ), had significantly higher card prices when compared to offensive linemen. The variable that had the strongest impact on card value was vintage ( $t = -10.916$ ,  $p < .000$ ) with a standardized coefficient of -.074. Finally, our results show that race does *not* significantly affect the value of a player's card when controlling for the other variables ( $t = -1.014$ ,  $p = .312$ ), though the relationship is in the predicted direction.<sup>9</sup>

**Table 1: Regression of Independent Variables on Card Value**

	Unstandardized Coefficients	Standard Error	t value	Significance t
(constant)	149.104	13.336	11.180	.000
Race (black) <sup>a</sup>	-.147	.145	-1.014	.312
Availability (Hi) <sup>b</sup>	.183	.147	1.243	.216
Vintage	-.074	.007	-10.916	.000
Log-Finalist	-.205	.080	-2.547	.012
Position-QB <sup>c</sup>	2.037	.226	8.997	.000
Position-RB <sup>c</sup>	1.232	.214	5.750	.000
Position-WR <sup>c</sup>	1.055	.224	4.703	.000
Position-TE <sup>c</sup>	.426	.326	1.308	.193
Position-DL <sup>c</sup>	.578	.203	2.854	.005
Position-LB <sup>c</sup>	.550	.233	2.359	.020
Position-DB <sup>c</sup>	.415	.234	1.772	.079

R<sup>2</sup> = .705

Adjusted R<sup>2</sup> = .681

<sup>a</sup> whites are reference group

<sup>b</sup> low availability is the reference group

<sup>c</sup> offensive linemen are reference group

In order to get a more intuitive sense of the effect of vintage on card value we need to examine a “typical” card in terms of real dollars rather than logged-dollars. If we select a card for a white defensive lineman, with median performance levels (1), and high availability, the model would predict a card from 1980 would be worth \$28.36. The same card from 1975 would be worth \$41.06 and from 1970 the card would be valued at \$59.44. Note that the increase in card value is not linear as we increase the age of the card. When the dependent variable is reverse-log-transformed, the coefficients behave in a multiplicative, rather than additive fashion.

## Discussion

The findings from the analysis suggest that (1) race does not matter, (2) vintage, or the year the card was produced, matters, (3) card availability is not related to value, and (4) position and performance of player affects value. As would be expected, increases in performance leads to higher levels of card value and players in the skill positions have higher card values. Ultimately, it is the vintage of a card, not the race of the player on the card that has the greatest effect on card value.

The card values of black players are below those of white players at all positions and at all levels of availability, but there is a relative scarcity of rookie cards for black players admitted to the HOF. Why are there fewer cards for these players? As noted earlier, our analysis used the prices of rookie cards in near-mint to mint condition to determine availability or scarcity. It is widely known that the rookie cards of recent players were produced in greater quantities than were the vintage cards of earlier members of the HOF (Williams, 1995). Are fans and collectors of cards of black players disproportionately more likely to hold on to the cards for a longer period of time rather than buying and selling them as investments? Collectors who see cards as investments are more likely to submit them for evaluation. Yet, the notion of supply and demand would suggest that if there is a relative scarcity of cards of a subset of members of the HOF, those cards should have greater value.

One of the realities is that there were many fewer blacks in the NFL in the 40s, 50s, and 60s, and cards of that period are among the most valuable, in part because they are old and collectors like “old things.” When taking vintage into account, the “expected” effects of race do not appear. What might appear as race effects given the overall differences in rookie card values of white and black HOF members may simply be a function of fewer black players on cards from an era with more valuable cards.

Certainly vintage and availability are closely related; as time passes cards have a greater and greater likelihood of being lost, damaged, thrown away, or purposefully destroyed, and with fewer cards, existing ones should be more valuable. However, the positive relationship between vintage and availability, though not significant, suggests that more available cards are also more valuable, which is not what we predicted. It is possible that somewhat higher value of more recent cards reflects collectors’ greater familiarity with the players. These are the players that have been widely seen in the ballparks and on television by collectors. As noted earlier, it is also the more recent cards that were produced in much greater numbers.

## Conclusions

Football cards are pieces of cardboard that have become collectibles, and like all collectibles, they exist in a market environment where the supply and demand of the cards determine their value. But unlike most other collectibles, such as abstract art, dishes, or toys, football cards provide clear representations of the race of players on the cards. Buyers of the cards are not only buying cardboard objects, they are buying objects that remind us of race. Does the race of the football players on those cards, those who are among the elite in the sport by mere inclusion in the HOF, affect the value of their cards? The findings from our analysis lead us to believe that it does not.

These findings are consistent with some of our previous research where we found no evidence of race effect in the value of rookie cards for members of the Baseball HOF (Hewitt et al., 2005). In that study, race of player did not affect card value, while both career performance and card availability exerted significant and strong effects on card values for both white and black players.

Should we conclude that race has no effect on card values? Not necessarily. The enshrinement into the Hall of Fame represents a perception that a player is among the very best to have played the game. Only a very small percentage of all professional football players are ever enter the HOF. Once a player has achieved this high and honorable status, he is truly idealized in the minds of others (Goffman, 1959). He is now a social icon or cultural hero. This lofty status is reserved for very few and bestows upon those who achieve it a special recognition thousands of others only dream of. In a sense, a player is not seen so much in terms of black or white, but as someone who arouses in the minds of many, memories and fantasies of days in their past. Roland Gift, lead singer for the Fine Young Cannibals, expressed this dynamic when he said, "I'm not black, I'm famous" (Gates, 1997:158).

In the final analysis, if race has an effect on card collecting, it is likely to be in rather subtle ways. Unfortunately, our sample may simply be too small to draw absolute conclusions. There may be too little variance with such a small sample of only the very best players. Our analysis was of a small group of players who are at the top of the game and voted into the HOF by the PFWA. Because they are in the HOF, all of their rookie cards are more valuable and more expensive than less stellar players.

Does race appear to influence the rookie card values of HOF players? The attitudes and beliefs of football card collectors, who are overwhelmingly white and middle-aged, are likely to reflect the attitudes and beliefs of the larger society toward people of color (Bloom, 1997; Helmrich, 1997). It is thus a possibility that the way collectors value cards reflects what Feagin (2000) claims to be a systematic racist or racial ideology

that is a fundamental component of the social organization of American society. But that is an unverified possibility, at least in current analysis.

Does this mean race does not affect the value of football cards? Bonilla-Silva (2003) argues that contemporary racism is disguised by referring to liberal notions of meritocracy and the minimal of racism. In accordance with this logic, many argue that equally deserving blacks rise to the top and that discrimination is not as bad as it once was because of the exceptional black representation across different arenas of social life. Accordingly, the question of whether card value depends on whether a player is black or white can not be answered in simple dichotomous terms for several reasons.

For example, players in our sample, which includes only those selected into the Hall of Fame, have already been affected by several decisions in the selection process that some studies have found to be affected by race. Thus, only those players, including black players, deemed as the *crème de la crème*, are included in our sample. The fact that the HOF selection process includes factors other than performance subjects black players to an analysis of their selection worthiness by a primarily white decision-making body.

Although our findings indicate a lack of significant relationship between player race and card value, it is important to remember that the analysis has been limited to a pre-selected sample, that is, a sample that includes black players who have already been deemed worthy of selection by the larger, dominant white society. The fact that some black players have been allowed into the Hall of Fame, and the card values of these players are similar by race, does not establish evidence for an arena of social life free of racism or racial thinking.

Our finding—that no statistically significant difference exists in the value of their cards based on race—must be understood as only being operative for, or indicative of, black players found to be acceptable for inclusion in the Football Hall of Fame. That is, there maybe a form of tokenism at work here, a seeming level of equality based on based on those black players found to be worthwhile and acceptable by a predominantly white decision-making body.

## Notes

<sup>1</sup> Prior to 1970, there was no defined procedure for selecting inductees from a finalists' list.

<sup>2</sup> Because the card values of players can be substantially different depending upon which company produced the card sets and the number of cards produced by different companies, we limited our analysis to cards produced prior to 1989 when Topps' football card monopoly ended.

<sup>3</sup> Of the 81 HOF members excluded, 35 were coaches or contributors and 42 started their careers before 1946. Four additional players were omitted: Anthony Muñoz was the sole Latino in the HOF, Bill Willis never had a "rookie" card, Jan Stenerud was the only kicker, and Barry Sanders began his career after 1988. For a complete listing of HOF members excluded contact the authors.

<sup>4</sup> A player's "rookie" card is the player's first appearance on a regular issue card from a *nationally* distributed card set.

<sup>5</sup> The 1948 Leaf and Bowman sets and the 1950 Topps Felt Backs have a high rating of only "excellent-mint" on Beckett's web site; therefore this is the rating used for these sets.

<sup>6</sup> We must caution that this measure of card availability has limitations. First, it is based only on two (although the most widely used) card-rating companies. Second, there is likely to be some number of unrated near mint or better condition cards sold locally or at state, regional, or national sports card events. In these situations, buyers and sellers negotiate and agree on the condition of the cards. In any event, the number of cards sent to PSA and Beckett for rating does provide a measure of relative scarcity within the total population of cards submitted for rating.

<sup>7</sup> Players who were inducted into the HOF prior to 1970 were assigned a "1" for the number of times they were on the final ballot.

<sup>8</sup> For other lists of top NFL players see the Pro Football HOF website and Barber (1999).

<sup>9</sup> Two additional variables were tested: The interaction of race and vintage, and the interaction of race and availability. Neither variable, separately or together, significantly explained variance in card price.

## References

- Andersen, Torben and Sumner J. La Croix. 1991. "Customer racial discrimination in Major League Baseball." *Economic Inquiry* 29:665-77.
- Barber, Phil. 1999. "The Hitmen—100 best players in National Football League history." *The Sporting News* 233, 44:12.
- Beckett.com. "Beckett Sport Card Website." Retrieved March, 2005. (<http://www.beckett.com/estore/>).
- Belk, Russell W., Melanie Wallendorf, John Shery, Morris Holbrook, and Scott Roberts. 1988. "Collectors and collecting." *Advances in Consumer Research* 15:548-53.
- Bloom, Jerry. 1997. *A House of Cards*. Minneapolis, MN: University of Minnesota Press.
- Bonilla-Silva, Eduardo. 2003. *Racism Without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States*. Oxford: Rowman and Littlefield Publishers.
- Bonner, Mike. 1995. *Collecting football cards: A complete guide with prices*. Randor, PA: Chilton Book Company.
- Brown, Jill and Gordon Bear. 1999. "Minorities in major league baseball: 1952-1987." *International Review for the Sociology of Sport* 34:411-22.
- Carroll, Bob, Michael Gershman, David Neft, and John Thorn (eds.). 1999. *Total football II: The official encyclopedia of the National Football League*. New York: HarperCollins.
- Clary, Jack and L. Kirshbaum. 1986. *Topps football cards: The complete picture collection*. New York: Warner Books.
- Coakley, Jay J. 2003. *Sport in Society: Issues and Controversies*, 8<sup>th</sup> edition. New York: McGraw-Hill.
- Csikszentmihalyi, Mihaly and Eugene Rochberg-Halton. 1981. *The meaning of things: domestic symbols and the self*. New York: Cambridge University Press.
- Danet, Brenda and Tamar Katriel. 1989. "No two alike: Play and aesthetics in collecting." *Play and Culture* 2:253-77.
- Desser, Arna, James Monks, and Michael Robinson. 1999. "Baseball Hall of Fame voting: a test of the customer discrimination hypothesis." *Social Science Quarterly* 80:591-603.

- Evans, Jr., Arthur. 1997. "Blacks as key functionaries: A study of racial stratification in professional sport." *Journal of Black Studies* 28:43-59.
- Feagin, Joe. 2000. *Racist America: Roots, current realities, and future reparations*. New York: Routledge.
- Fine, Gary A. 1987. "Community and boundary: Personal experience stories of mushroom collectors." *Journal of Folklore Research* 24:223-40.
- Fort, Rodney and Andrew Gill. 2000. "Race and ethnicity assessment in baseball card markets." *Journal of Sports Economics* 1:21-38.
- Fox, John. 1997. *Applied regression analysis, linear models, and related methods*. Thousand Oaks, CA: Sage.
- Frey, James H. and Stanley D. Eitzen. 1991. "Sport and society." *Annual Review of Sociology* 17:503-22.
- Gabriel, Paul E., Curtis D. Johnson, and Timothy J. Stanton. 1999. "Customer racial discrimination for baseball memorabilia." *Applied Economics* 31:1331-35.
- Gonzalez, Lettie and E. Newton Jackson. 2003. "Perceptions of success in professional baseball: A photo-elicitation study." Paper presented at the Annual meeting of the American Alliance for Health, Physical Education, Recreation, and Dance, Philadelphia.
- Helmrich, William. 2004. *The Things They Say Behind Your Back*, 5<sup>th</sup> edition. New Brunswick, NJ: Transaction Publishers.
- Hewitt, John D., Robert Muñoz, Jr., William L. Oliver, and Robert M. Regoli. 2005. "Race, performance, and baseball card values." *Journal of Sport & Social Issues* 29:411-425.
- Jewell, R. Todd. 2003. "Voting for the Baseball HOF: The effect of Race on Election Date." *Industrial Relations* 42:87-100.
- Jewell, R. Todd, Robert W. Brown, and Scott E. Miles. 2002. "Measuring discrimination in Major League Baseball: Evidence from the Baseball HOF." *Applied Economics* 34:167-77.
- Jibou, Robert M. 1988. "Racial inequality in a public arena: the case of professional baseball." *Social Forces* 67:524-34.
- Lomax, Michael E. 1999. "The African American experience in professional football." *Journal of Social History* 33:163-78.
- McIntosh, William E. and Brandon Schmeichel. 2004. "Collectors and collecting: A social psychological perspective." *Leisure Sciences* 26:85-97.
- Messitte, J. and Irene Powell. 1995. "Customer race discrimination in the market for baseball cards." Paper presented at Department of Economics, Grinnell College.

- Nardinelli, Clark and Curtis Simon. 1990. "Customer racial discrimination in the market for memorabilia: The case of baseball." *Quarterly Journal of Economics* 105:575-95.
- Ogden, David and Michael Hilt. 2003. "Collective identity and basketball: an explanation for the decreasing number of African American on America's baseball diamonds." *Journal of Leisure Research* 35:213-28.
- Professional Sports Authenticator. "Population Report." Retrieved March, 2005. (<http://www.psacard.com/>).
- Pro Football Hall of Fame. "HOFers." Retrieved February, 2005. (<http://www.profootballhof.com>).
- Regoli, Robert M. 1991. "Racism in baseball card collecting: Fact or fiction?" *Human Relations* 44:255-64.
- Regoli, Robert M., John D. Hewitt, Robert Muñoz, Jr., and Adam M. Regoli. 2004. "Location, location, location: The transmission of racist ideology in baseball cards." *The Negro Educational Review* 55:75-90.
- Rigby, Douglas and Elizabeth Rigby. 1944. *Lock, stock and barrel: The story of collecting*. Philadelphia: Lippincott.
- Robinson, Rick. 1987. "Why this piece? On the choices of collectors in the fine arts." Paper presented at the Annual meeting of the American Sociological Association, Chicago.
- Spooner, Brian. 1988. "Weavers and dealers: The authenticity of an Oriental carpet." Pp. 195-235 in *The Social life of things*, edited by A. Appadurai. Cambridge: Cambridge University Press.
- Stone, Eric W. and Ronald S. Warren. 1999. "Customer discrimination in professional basketball: Evidence from the trading-card market." *Applied Economics* 31:679-85
- Sullivan, Dean. 1997. *Early innings: A documentary history of baseball, 1825-1908*. Lincoln, NE: Bison Books.
- Thorn, John, Pete Palmer, and Michael Gershman. 2001. *Total baseball*, 7<sup>th</sup> edition. New York: Total Sports.
- Wanderer, Jules. 2003. "Hobo signs." *The American Journal of Semiotics* 17, 4:131-46.
- Williams, Pete. 1995. *Card Sharks*. New York: Macmillan Publishing Company.