

ABSTRACT

Title of Document: HOW UNIVERSITY ATHLETIC PROGRAM SUCCESS ASSOCIATES WITH UNIVERSITY PRESTIGE VIA THE HALO EFFECT FOR DIFFERENT TYPES OF UNIVERSITIES.

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Athletic program success may be a way for universities to achieve prestigious status. The halo effect may allow perceptions of athletic programs to be extended to other aspects of the university. This process was hypothesized not only to occur, but to occur to a differing extent across university types. I predicted that universities that are new, secular, public, outside of the Northeastern United States, and that do not have name designations would show the greatest gains in prestige upon achieving high athletic success.

Regression analyses tested the relationship between expert ratings of universities and athletic success rates of major football and basketball sports programs. Results indicated a positive association between athletic success rates and university prestige. This process did not significantly vary by university types. Results also showed expert ratings of universities highly correlated with those of non-experts, indicating that expert assessment is a good proxy for typical prestige perceptions.

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By

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Chapter 1: Intercollegiate Athletic Success and University Prestige: An Introduction

Comparisons of university quality in the United States are often by reputation, such as prestige (Carter 1966; Brooks 2005). This prestige, in turn, may be affected by the success of a school's prominent athletic teams. Indeed, research shows that the success of a prominent sports program may be a basis for perceived university quality (Kealy and Rockel 1987). Successful athletic programs are also likely to become commercialized, and this promotion leads to visibility that can enhance the image of the university (Kezar 2004; McAllister 1998). In recent years, competition among universities for athletic success has become a high priority, indicating its importance. Lovaglia and Lucas (2005) found some tentative support for the notion that athletic programs are associated with the prestige attached to university degrees. Lovaglia and Lucas had students and raters evaluate states according to the prestige and athletic visibility of their major public universities.

I perform a more direct test by gathering evaluations of particular universities. I use the USNews and World Report's peer assessment rating within its university ranking system to test the association between athletic success and academic prestige, controlling for measures of academic quality. I propose that the halo effect is one process through which athletic success becomes attached to university prestige. The halo effect is when one characteristic of an object (a university athletic team) is known, and feelings about that single characteristic are generalized to the whole object (the university itself) (Holbrook 1983; Landrum, Turrisi and Harless 1998; Sine, Shane and Di Gregorio 2003).

This may be one process by which university athletic programs generate university prestige (Cole and Lipton 1977; Landrum, Turrisi and Harless 1998; Tatar 1995; Toma 1999). There is also evidence suggesting that different types of universities may benefit the most from this relationship (Cole and Lipton 1977; Burris 2004). I test whether athletic success associates with university prestige and, if so, which university types gain the most prestige as a result of athletic success. I predict new, secular, public, and non-Northeastern universities, as well as universities with name designations in their title will show the biggest gains in prestige ratings upon achieving athletic success.

Chapter 2: University Perceptions

Like any institution, American universities are affected by the way they are perceived, and these perceptions are critical for survival of the institution. Appraisals such as these create a university image, which is the immediate expression of that university's characteristics (Landrum, Turrisi, & Harless 1998). If a university image is maintained, it will ultimately lead to a university reputation, where current university appraisals take place in the context of that school's history (Cole and Lipton 1977). One university perception that is often desired is that of prestige, or overall perceptions of academic quality (Tatar 1995). A university must not only properly create its reputation by controlling the perceptions of the public, but also compete with other universities with the same goal (Landrum, Turrisi, & Harless 1998).

University Image and Reputation

The image of a university in the United States is important for its success (Landrum, Turrisi, & Harless 1998). Research has shown that perceptions held for an academic organization will also impact the likelihood that a person will engage in transactions with that organization (Sine, Shane, and Di Gregorio 2003). Through this increase in interactions, a university will likely attract applicants and other beneficial resources. This is likely because university reputations are perceived by many as indicative of educational quality (Brooks 2005). As a result, academic institutions dedicate considerable assets to creating positive images and raising their public profiles (Toma 1999).

Universities provide a service to the community, and in doing so, are accountable for how they present themselves (Tatar 1995). Maintaining and enhancing a university image, once established, can provide valuable marketing support for years (Landrum et al. 1998). It appears that the processes that create prestige in the first place are the same processes that tend to maintain it (Cole and Lipton 1977). Prime examples are the so-called “Ivy League” institutions. These universities are typically long-standing, have a proven track record of academic success, and likely need not work as hard as other universities to maintain their image. The reason for this is that perceptions of universities far outlive their respective realities. It is the university’s image, not necessarily its reality, to which people respond. Therefore, maintaining a positive image helps a university survive (Landrum et al. 1998).

University Prestige

University prestige is a public reputation of respect and overall perceptions of academic quality by both those within and outside of academia. American schools are motivated to be seen as prestigious, as students and community members seek to be affiliated with prestigious institutions (Tatar 1995). Prestige also allows decisions to be made in the absence of any other information (Sine, Shane and Di Gregorio 2003). This is perhaps why potential applicants and their families are more likely to pursue a prestigious university from the beginning. A university perceived as prestigious, however, is not necessarily a better institution (Tatar 1995). Actual university quality may differ greatly from what is perceived by applicants (Cole and Lipton 1977). Research has also demonstrated that universities perceived in the highest range of the prestige continuum seldom change position (Tatar 1995). Thus, once a university

establishes itself as a perceived high-quality institution, it will likely remain there. Poor performances and negative characteristics may be ignored or attributed to something external to the university itself.

Prestige as a sociological concept plays a particularly important role in the academic system (Abbott and Schmid 1975). Sociologists regard prestige as a division of power and privilege in society, whereby status is conferred to those affiliated with a prestigious institution (Tatar 1995). Students who attend a prestigious university are then seen as obtaining some of this prestige for themselves. Thus, students typically have a strong desire to attend prestigious universities (Tatar 1995). Through consensus, a prestige perception signals the quality of a university, as well suggests appropriate emotional responses when interactions take place (Sine, Shane, and Di Gregorio 2003). In this way, prestige may be the force that best links perceptions of a university to society. The benefits of being considered a prestigious university are many, and each helps to ensure the university will thrive for years to come.

A university can become prestigious in a number of ways. Conventionally, universities with prestigious departments are believed to be highly productive (Burriss 2004). Research productivity and the number and type of degrees awarded contribute more to the explanation of prestige than annual income, library volumes, number of full-time faculty, or the value of the physical campus combined (Abbott and Barlow 1972). The weight of tradition can also determine university prestige. Institutions that first establish prestige will likely maintain a high level of prestige over time, despite later fluctuations in productivity (Burriss 2004). Finally, extremely successful athletic programs might associate with the prestige of a public university's academic degrees (Lucas and

Lovaglia 2005). Prestige, in the form of public celebrity and financial benefits, comes to the institution that generates winning traditions (Hill, Burch-Ragan and Yates 2001). Gump (2006) argues that university prestige, such as the kind accrued through successful athletic programs, occurs entirely by association. Through this association, winning athletic programs can associate with perceptions of university prestige.

University prestige is often indirectly measured through nation-wide surveys and polls of academic reputation. Most notable in the United States is the USNews and World Report's annual university rankings (Morse and Flanigan 2007). Universities are judged through both objective measures such as tuition and number of faculty, and subjective measures such as the ratings of experts. Indeed, a large portion of USNews's university reputation rating is obtained by having important university administrators rate every other university in the nation (Morse and Flanigan 2007). This measure is dubbed "peer assessment" in the USNews and World Report's ranking system. Despite being subjective in nature, the peer assessment variable has been used in studies as an approximation for university prestige. Mixon, Lyon & Beaty (2004) used peer assessment to test the impact of increasing national secularization on the prestige perceptions of religious universities. The end result is university rankings that are highly credible to the general public (Clarke 2002).

Chapter 3: Athletic Program Perceptions

The perceptions of intercollegiate athletic programs are linked to the perceptions of the university as a whole. As such, positive perceptions of an intercollegiate athletic team will benefit the university itself. By drawing people to the campus, sporting events give their audience an opportunity to become directly involved with the university, and a reason to support it (Toma 1999). These programs are also almost always cast in a celebratory light by the university, encouraging students, alumni, and members of the community to perceive the athletic program positively (Cowley 1999; Budig 2007). In fact, this occurs to such an extent that intercollegiate athletic programs are believed to be one of the significant filters through which society views university education (Pascarella, Truckenmiller, Nora, Terenzini, Edison, & Hagedorn 1999).

How Athletic Programs Can Associate With Perceptions of University Prestige

Research into American universities has revealed that intercollegiate sports are believed to help athletes graduate (Matheson 2005; Watt and Moore 2001). For instance, Tucker (2004) found that highly successful football teams have a positive impact on overall graduation rates. Additionally, athletes tend to graduate at higher rates than other students (Matheson 2005). This is likely because many student athletes persist in their studies so as to remain eligible for play and have various forms of academic support such as tutors. Also, student athletes build character and learn responsibility by taking on the demanding roles of both an athlete and a university student (Watt and Moore 2001). By

helping to better the lives of team players, positive perceptions of intercollegiate athletic programs may increase, benefitting the university as a whole.

Intercollegiate sports are also important because they help connect the university to important individuals. Major college sporting events give the university a reason to invite alumni to visit the campus. Upon visiting the campus, alumni may be convinced to donate valuable time or money to the university (Budig 2007; Grimes and Chressanthis 1994). Intercollegiate athletic programs also provide a forum for entertainment that attracts members of the surrounding community (Toma 1999). In addition to immediate patronage at the event, community members may become invested in the long-term success of the team. This involvement incorporates perceptions of the athletic team into the identity of the community itself (Toma 1999). By eliciting positive responses from these important individuals, university athletic programs may enhance positive perceptions of the entire academic institution.

Athletic participation may enhance the social mobility of individuals from low SES backgrounds as well (Pascarella et al. 1999). Athletes who come from high schools with poor academic reputations may still perform well on the sports field and be recruited. The same athlete may also get accepted to universities that would not ordinarily have admitted him or her. Indeed, research has suggested that intercollegiate athletics may allow the poor to rise on the basis of merit (Spring 1974). It is possible that the public realize and appreciate this path that intercollegiate athletic programs open up to the less fortunate. Because this path exists within the overall university structure, positive university perceptions may increase.

Chapter 4: Impacts of Athletic Success

Athletic success for a college sports team often results in increased commercialization. It is partially through this increased commercialization that perceptions of athletic programs are linked with the overall perceptions of the university (Tucker 1992). In turn, commercialization leads many universities to see their athletic programs as opportunities to earn a profit (Budig 2007). This potential profitability often leads universities to further promote their teams in the hopes of making even more money (Toma 1999). Commercialization and profitability as a result of athletic success ultimately increase the overall visibility of intercollegiate athletic programs (Toma 1999). Visible athletic programs then allow for the potential to showcase the university in a positive manner, resulting in prestigious perceptions.

Commercialization and Profitability of Athletic Programs

Recent economic growth in the United States has created a consumer society seeking multiple forms and venues of entertainment (Hill et al. 2001). Intercollegiate athletic competition provides one of the most popular means for this mass entertainment (Hill et al. 2001). Indeed, public support for higher education is likely greater when universities have athletic programs, as audiences for athletic events receive entertainment from local sources (Pascarella, Truckenmiller, Nora, Terenzini, Edison, and Hagedorn 1999; Spring 1974; Kezar 2004). Businesses quickly take note when intercollegiate sports programs have large and eager audiences such as these. Competing to fund athletic events or facilities, commercial sponsors seek to increase the awareness of their product or

service by associating it with an athletic program that has a strong fan base (McAllister 1998).

This competition among advertisers allows intercollegiate sports programs to earn money for the university. Yet, despite the perceived importance of profitability, few intercollegiate athletic programs in the United States actually make money. As of 2007, less than 15 of the hundreds of major collegiate sport programs were profitable in and of themselves (Budig 2007). However, aside from the potential for profitability, commercialized athletics also bring greater awareness of the university campus as a community resource and public good (Kezar 2004). Because successful athletic programs are often commercialized, and commercialization benefits university perceptions, I propose that successful athletic programs will associate with the prestige of the entire university.

Athletic Program Visibility

Commercialization in its basic form is promotion. Intercollegiate athletic programs, through the mass media and journalism, have become one of the most visible aspects of universities (Kezar 2004). Oftentimes, these sport programs are so prominent that they become the key reference points to the universities for external relations (Toma 1999). Big-time sports such as football and men's basketball also allow an often impersonal university to present itself with a "human" face (Toma 1999). Athlete news, game coverage, broken records, and product endorsements are readily broadcast to the world at large (Duderstadt 2000). This excessive athletic program visibility can cause fans to emotionally bond with their team, and the university itself (Duderstadt 2000).

Research also suggests that the visible physical landmarks of an athletic program can have a bearing on potential student perceptions of a university. Campus visits are highly influential in perceptions of academic quality of universities (Kealy and Rockel 1987). It is likely that impressive stadiums and training facilities that are promoted and highlighted in campus tours leave lasting impressions on applicants and their families. These buildings may be impressive in size and design, and add a certain aesthetic quality to the university. These facilities also make a distant and impersonal university seem accessible and available to applicants through contact and familiarity (Toma 1999). Potential students who are left with a positive experience from a campus visit are likely to be influenced to attend that university (Kealy and Rockel 1987). These athletic facilities may impress applicants and their families, leading to a prestigious view of the university.

Chapter 5: How Perceptions Change

The Halo Effect

The image of an American university is an important factor in determining success, both in the long and short-term. University reputations are ultimately very important to potential applicants when deciding their educational future (Moogan and Baron 2003). Often, when people attribute status or prestige to a university they do so based off perceptions they hold, rather than concrete factual knowledge or experience (Abbott and Schmid 1975; Cole and Lipton 1977; Landrum, Turrisi and Harless 1998). When applying, both potential applicants as well as their parents, typically begin knowing very little about the university in question. Pre-existing knowledge of an institution's reputation can be an influential part of a student's desire to attend or even apply to a university (Moogan and Baron 2003).

This initial image formation is often the result of the halo effect. Halo effects may be thought of as subconscious efforts to maintain cognitive consistency (Abelson, Aronson, McGuire, Newcomb, Rosenberg, and Tannenbaum 1968). Typically, the halo effect relates to consumer behavior when only a single characteristic of a product is known. Here, it is easier for the consumer to understand the entire product by generalizing subjective attitudes of that singular characteristic to all other aspects of the object in question (Holbrook 1983). With regards to universities, institutional prestige via the halo effect may distort the perception of irrelevant characteristics, invent factual data, or exaggerate certain attributes (Tatar 1995; Cole and Lipton 1977).

Indeed, evidence suggests that the reputation of a university is more the result of a few key referential points than overall performance (Cole and Lipton 1977). Theories of prestige state that perceptions of one facet of an organization can transfer across domain barriers (Sine, Shane, and Di Gregorio 2003). Therefore, the halo effect can cause perceptions of prestige to be transmitted from one aspect of a university to another. Finally, many potential applicants to universities have a very limited amount of information at their disposal. Even the most well-informed parents and students know very little about what constitutes a quality institution (Tatar 1995). This suggests the halo effect on perceptions may be a powerful force when attempting to render a judgment on university quality.

Limited evidence of the halo effect impacting the relationship between university prestige and athletic programs currently exists. Research indicates intercollegiate athletics help construct a positive institutional identity, where university reputation is often constructed as a result of a few highly visible “star” members such as high profile athletes (Cole and Lipton 1977, Landrum, Turrisi and Harless 1998; Tatar 1995; Toma 1999). Emotional responses attached to these key athletes are then attributed to the athletic program, and to the university itself. This process helps high-profile sports programs be seen by members of the community as something distinctive, central, and stable about the institution itself (Toma 1999). In this way, positive perceptions of athletic success via the halo effect allow individuals to perceive the university in a favorable manner.

University Type

It is unknown whether there is a relationship between university prestige and athletic success, and whether this relationship differs across different kinds of universities via the halo effect. Halo biases, however, are theorized to vary across situations. When the specific characteristics of a product are more ambiguous, perceptual judgments become more dependent on global product images (Holbrook 1983). For universities, this means that those colleges with similar or undifferentiated characteristics across several different dimensions will be affected the most by judgments resulting from halo effects. If a university is similar in many regards, or the observer is lacking information, then what little information is known will be greatly relied on. This may be true of smaller, and/or lesser known institutions with little to no media or commercial attention.

Research has demonstrated that initial prestige perceptions differ across different types of universities. The university name is equivalent to a product brand, and prestigious schools such as the Ivy League leave parents and students feeling secure in their investment (Gibbs 2006). Universities with “State”, “A&M”, or regional designations (Ex: North) in their names, however, receive significantly lower prestige rankings net of any effects of productivity (Jacobs 1999). Additionally, newer forms of educational institutions such as technical (“Tech”) schools often do not resemble their more traditional, prestigious counterparts. As a result, universities with these name designations are perceived to be less prestigious (Kraatz and Zajac 1996). Studies have also shown that high school students currently applying to colleges view newer universities as “not as good” as older ones. They feel the reputation at traditional universities are better, and are influenced by their parents to apply there (Moogan and

Baron 2003; Cole and Lipton 1977). Despite evidence to the contrary, the belief that graduates from older universities earn higher career wages has also been documented (Chevalier and Conlon 2003). Finally, Blau (1973) argues that older universities are perceived to possess strong academic traditions developed over several decades. These prestigious perceptions are so powerful they even encourage quality instructors to join the faculty of older universities (Blau 1973).

Research has also shown that prestige influences American university enrollment across different regional locations (Abbot and Schmid 1975). Schools in the Northeast region of the United States have more prestigious reputations (Blau 1974), and results hold even when research performance and faculty notoriety are controlled for (Cole and Lipton 1977). In fact, Whitehead (1986) conducted a literature review that outlines how southern universities have been perceived as lagging behind the more traditional northern schools for over two centuries. This perception has endured to more recent decades. Despite acquiring quality faculty members easier than northern universities, schools in the south are perceived as less prestigious because their faculty have lower average salaries (Blau 1974).

Next, religious affiliated universities are seen as more prestigious than non-religious universities (Suitor, Powers & Brown 2004; Abbot and Schmid 1975; Blau 1974). Indeed, research has shown that the influence of prestige is greatest for religious universities (Abbot and Schmid 1975). Students are also more likely to enroll in religious universities because of their reputation (Abbot and Schmid 1975). This is in spite of the fact that religious schools attract better students than their level of academic quality warrants (Blau 1974). Parents also hold prestigious perceptions of religious schools

because they believe it will enhance the character development of their children and encourage them to focus on academics (Suitor, Powers & Brown 2004). Finally, schools with private, as opposed to public, funding are rated as more prestigious (Cole and Lipton 1977). According to *The Economist* (2008), despite an exponential increase in private school tuition in recent decades, families still endeavor to enroll their children. Parents believe that their children will learn more and have broader academic opportunities if they attend private schools (Suitor, Powers & Brown 2004). It is unlikely that families would devote so many resources to obtain private education if they did not perceive it as more prestigious. Lastly, *Mixon et. al.* (2004) discuss how private universities often have a religious affiliation, and that this combination of factors greatly enhances their overall university reputation.

To review, the relationship between athletic success and university prestige may be explained by the halo effect. Again, the halo effect is when only one attribute of a university is known and then extrapolated to all other aspects of the university. Emotional responses and perceptual understandings are extended to cover all other facets of the university during this process. Halo effects should be largest when all aspects of a university are ambiguous or similarly negative in nature. Consequently, a university initially regarded as having low prestige should benefit the most from athletic success via the halo effect. Universities expected to be impacted in this manner are new, secular, public, outside of the Northeast, and/or possessing a name designation of some kind. Since athletic program perceptions are linked to university perceptions, I propose that the halo effect process will allow highly successful sports programs to associate with

academic prestige, net of academic predictors of prestige. I also expect this process to differ across university types.

Chapter 6: Hypotheses

Based on this prior research I am formulating the following hypotheses:

1) Higher athletic success will be associated with higher academic prestige net of other predictors of prestige. Evidence suggests that increased commercialization, profitability, and visibility result from athletic success because this success is perceived positively.

Prior research also indicates that the perceptions of athletic programs are strongly tied to the overall perceptions of the university. Thus, when athletic success is achieved, so is university prestige.

2) Relative to older universities, newer universities will show the biggest gains in prestige ratings with increased athletic program success. Older universities are perceived to have outstanding academic traditions with reputations that have been maintained over a longer time. They are also believed to just be “better”, and to lead to lucrative careers. As a result, recently founded universities are considered to lack prestige, and should stand to gain more upon achieving athletic success.

3) Relative to religious universities, secular universities will show the biggest gains in prestige ratings with increased athletic program success. Religious universities are perceived to have excellent academic reputations and tend to attract students because of this. Religious universities are also believed to better the character of enrolled students and to strengthen their academic resolve. Thus, secular universities are believed not to be prestigious, and should stand to gain more upon achieving athletic success.

4) Relative to private universities, public universities will show the biggest gains in prestige ratings with increased athletic program success. Private universities are perceived to give better educations and lead to better academic opportunities. Enrollment in private universities is also highly valued, despite increases in tuition. Because of this, public universities are perceived to lack prestige, and should stand to gain more upon achieving athletic success.

5) Relative to other universities, universities with “State”, “A&M”, or other designations in their names will show bigger gains in prestige ratings with increased athletic program success. Universities without name designations are likened to name brands that applicants and their families can trust for quality academic service. Those schools that do have name designations are seen as differing from standard, traditional educational institutions, and lacking prestige. Therefore, upon achieving athletic success, universities with name designations should benefit more than those schools that do not have name designations.

6) Relative to other universities, universities outside of the Northeast region will show the biggest gains in prestige ratings with increased athletic program success. The Northeast region of the United States is the origin of most prestigious universities, and this reputation is widely known. This perception has existed for centuries, and is still around today. As a result, universities outside the Northeast region are believed to lack prestige, and should stand to gain more upon achieving athletic success.

Chapter 7: Methods

I propose that there will be a relationship between athletic success and university prestige, and that this relationship will vary across different types of American universities. The goal of this study, then, was to assess whether athletic success associates with university prestige and, if so, to determine which university types gained the most prestige from having highly successful athletic programs. Different types of universities in the United States differ in terms of their initial reputation. It is possible that those universities that are already viewed as prestigious will have the least to gain as a result of the halo effect. Institutional prestige exists in a hierarchy, thus, those universities already at the top of this hierarchy should be subject to ceiling effects.

Design

In my study I conducted several linear regression analyses. With the first regression, I attempted to discern whether the athletic success rate (ASR) from Lucas and Lovaglia (2005) associated with USNews and World Report's measure of peer assessment. The ASR measure consists of seven factors: All-time winning percentage, number of conference championships in the last 5 years, attendance, number of bowl games in the last 5 years, number of national rankings 25 or above in the last 5 years, players who have gone on to play professionally in the NFL or NBA respectively, and number of wins in the last 5 years. For each factor, a program earns a score reflecting its percentage of the highest possible value for that factor. A program's score for a factor shows how successful that team is compared to the highest possible achievement of other

teams. The resulting ASR value places a university on a scale of 1 to 1000. Here, the USNews peer assessment variable served as my measure of university prestige. I controlled for SAT 50th percentile scores, percentage of the freshman class who graduated in the top 10% of their high school classes, and university acceptance rate. A positive association between athletic success rates and university prestige assessment when controlling for measures of academic quality will present strong evidence for a relationship between athletic success and university prestige. For ASR, peer assessment, and control variable values for each university, see Appendix A. For descriptive statistics of these variables, see Appendix B.

After I ran the general model, I tested for effects of university age, geographic region, religious or secular affiliation, private or public status, and inclusion of “state,” “A&M,” or regional designations in university name. In the final analysis, I included interaction terms along with the previous set of independent variables. I followed this pattern twice: first using two separate measures of ASR to distinguish between football and basketball programs, and a second using a combined ASR measure. For the combined measure, I took the higher of either the basketball or the football ASR values for each university. I took this higher value to represent the university’s overall athletic success, regardless of which kind of team it came from.

The USNews and World Report uses an approximation for prestige perceptions of universities that involves polling university presidents and other high ranking university officials (Morse and Flanigan 2007). To ensure that general prestige perceptions of universities correlated with the USNews and World Report’s peer assessment measure, I administered a short survey. 59 Participants were recruited from an undergraduate

sociology course. Participants were presented with a list of 28 universities and asked to rate each on a scale of 0 (not at all prestigious) to 100 (extremely prestigious). Each university on the list was selected from the USNews World Report's 2007 distribution of ranked universities. I made an effort to select universities representing a cross-section of peer assessment scores. The USNews report ranks universities in four distinct groups, or tiers. From each of these tiers I randomly choose seven schools. In this way, I hoped that the 28 universities selected for the list were a representative sample of the entire USNews ranking distribution. The survey administrators told participants that the list was from a university graduate student working on a thesis. I randomized the ordering of the list prior to distribution, presenting it to all participants in the same order. Finally, I sought to make the survey long enough to accurately represent the entire USNews ranking distribution, but not so long as to reduce participant effort and concentration. I felt that approximately 30 universities would achieve a balanced middle ground.

Sampling bias is an issue with my prestige assessment survey. Participants in this study were asked to participate during the discussion hour of their undergraduate sociology course. As a result, participants are a convenience sample of college students. Being current college students, these participants may have previously consulted the USNews and World Report's university rankings when deciding where to attend. Therefore, their responses to the survey may be biased toward agreeing with the USNews university prestige ratings. Additionally, while the USNews and World Report list of ranked universities consisted of hundreds of schools, the prestige perceptions list given to participants only had 28 schools. This was done to ensure participants, who were volunteers, would attentively complete and rate the entire list. There has been little

research conducted to test whether the university prestige perceptions of ordinary people agree with the expert testimony of the USNews and World Report's university rankings system. With my survey I attempted to show this relationship with recent data, but more extensive research in this area is recommended.

Finally, my series of regression analyses relied heavily on the Athletic Success Rate (ASR) measure from Lucas and Lovaglia (2005), which has its own limitations. The measure focuses mainly on recent athletic success, making it a useful tool for assessing the immediate impacts of this success on the university. This measure, however, is relatively new and untested in empirical research. The ASR was also originally designed to work in conjunction with another measure that assessed university academic success. It may be possible that solely measuring athletic success somehow reduces its effectiveness in rating university prestige. Lastly, the ASR measures athletic success mainly through quantitative calculations of statistics, but pays little attention to subjective perceptions of athletic success. This measure may get closer to fully encompassing athletic success if the opinions of fans, coaches, and university officials are included as a set of factors.

Chapter 8: Results

To my knowledge, the USNews & World Report's peer assessment measure has yet to be proven to represent the perceptions of typical people. Again, this measure was an expert rating compiled from high-ranking university officials and administrators. As experts, their peer assessment rating was included in the USNews university ranking system with the expectation it would represent a broad understanding of all American universities. However, it is possible the knowledge these experts possessed of universities other than their own is just as limited as the average person's. To determine this, I conducted a small survey post-test to correlate the USNews & World Report's university prestige ratings with the prestige ratings of non-experts (Appendix C). The prestige perception variables were very strongly correlated, $r(59) = .94, p < .01$. This lends strong support to the notion that the university prestige perceptions of experts used in these analyses are synonymous to the prestige perceptions of ordinary people. These results lead me to feel justified in using the peer assessment variable as my measure of university prestige.

Prior to this test, I first ran a series of one-tailed regression analyses. All analyses were one-tailed as athletic success was hypothesized not only to be significantly associated with university prestige, but to increase university prestige. It is also very unlikely that athletic success would actually decrease university prestige. The first regression used the peer assessment rating from USNews and World Report's 2007 university ranking data as the dependent variable, and the athletic success rate (ASR)

from Lucas and Lovaglia (2005) as the independent variable. Every university in the data set had an ASR for their basketball program. Not all of these schools, however, had an ASR for their football program. So as not to exclude any ASR values, I included both the football and basketball ASR values into the regression model as independent variables. This way, I could include universities with only one type of major athletic program. University control variables included the SAT 50th percentile, the percent of freshmen who graduated in the top ten percent of their high school class, and the university acceptance rate. As with the peer assessment measure, I also obtained these variables from USNews and World Report's 2007 university ranking data. Controlling for these variables, both the football ASR ($\beta = .067$, $t(165) = 1.785$, $p = .076$), and the basketball ASR ($\beta = .096$, $t(165) = 2.572$, $p = .011$) associated with peer assessment rating (see Table 1). Thus, athletic success rates for both separate types of major college sport teams associated with overall university prestige perceptions, supporting Hypothesis 1.

Next, I ran a regression analysis to check the assumption that certain university types are more prestigious than others. I included each of the five prestige predictor variables in the analysis: university age, university religious status, university public or private status, university name designation status, and university region. In addition to the control variables from the first analysis, I created dummy variables for each of the five prestige predictor variables and included them as independent variables. In this regression, the basketball ASR was found to associate with peer assessment ($\beta = .075$, $t(165) = 2.143$, $p = .034$), while the football ASR did not ($\beta = .037$, $t(165) = .967$, $p = .335$) (see Table 2). This means that only the athletic success rates for one type of athletic team associated with overall university prestige perceptions controlling for the five

different university types. It is unlikely that either of these highly visible Division I sports should have more or less of an impact on overall university prestige. Both sports are equally commercialized and popularized in the “big sports” world of college athletics. These findings may be the result of having basketball ASR values for every university, but only having football ASRs for some, and including both ASR variables individually in the regression model.

I next created a new combined ASR variable. For this variable, I took the higher of the two ASR values into consideration. In other words, if a university’s football ASR value was higher than the basketball ASR value, then the football ASR value was used for that university. However, several universities did not have football programs. This meant that many universities would be represented by a basketball ASR value by default. In addition to the three control variables from the original analyses, I entered the new combined ASR into the analysis as an independent variable. Controlling for measures of academic prestige, the combined ASR did associate with peer assessment ($\beta = .127$, $t(165) = 3.563$, $p = .000$) (see Table 3). This indicates that combined athletic success associates with overall university prestige perceptions, further supporting Hypothesis 1. The coefficient for combined ASR, however, was very low ($B = .004$). Combined ASR and peer assessment rating also demonstrated a weak, slightly positive relationship (see Table 4). No outliers existed to affect the regression line (see Table 5).

Next, I ran a regression analysis to check the assumption that certain university types are more prestigious than others. As with the first set of analyses, I used the same five university type dummy variables and academic prestige control variables. However, now a combined ASR measure was used in place of two individual athletic success rates.

This time, using the combined measure, athletic success rate significantly associated with peer assessment in a positive direction ($\beta = .095$, $t(165) = 2.657$, $p = .009$). This means that the combined athletic success rate measure associated with overall university prestige perceptions when controlling for measures of academic quality and the five different university types. Of the five different university types, only university age ($\beta = .107$, $t(165) = 2.700$, $p = .008$) and whether public or private ($\beta = .133$, $t(165) = 2.354$, $p = .020$) significantly predicted in a positive direction. These results indicate that, when a university is either younger or public, overall university prestige perceptions associate significantly with athletic success. For all other university types, prestige perceptions either did not associate significantly (see Table 6).

To test Hypotheses 2 through 6 that proposed differences in the effects of athletic success on university prestige for different types of universities, I ran another regression. This analysis was the same as the previous test, but also included interaction variables for each of the five prestige predictor variables. With this regression I attempted to determine if the ASR operates differently for different university types. Here, the combined ASR did not associate with peer assessment ($\beta = .038$, $t(165) = .243$, $p = .809$). Therefore, when including both university type predictors and interaction variables, combined athletic success rate no longer significantly associated with overall university prestige perceptions. This may be because too much noise was added to the equation, or because there was too much collinearity between the university type predictors. Of the five predictor interaction variables, only public versus private status even approached significance ($\beta = .158$, $t(165) = 1.444$, $p = .151$) (see Table 7). As such, ASR might

associate with prestige better for public versus private than any other university type. These results indicate that Hypotheses 2 through 6 were not supported.

Some of the university types in this analysis could, theoretically, be strongly linked together. For example, older universities tend to be found in the Northeastern region of the United States. In order to test for this collinearity, I ran a stepwise regression to analyze the variance inflation factors. All of the VIF values were under 10, so it is unlikely that collinearity is the reason the combined ASR variable failed to associate with peer assessment in the final model. This means that none of the interaction variables that were added into the regression model added any redundancy. However, since the ASR variable did associate with prestige in other analyses, some unknown factor is possibly affecting the outcome. This unknown factor may have caused the lack of significance, rather than there being an issue with the model itself.

Chapter 9: Discussion

I hypothesized that higher intercollegiate athletic success rates would be associated with higher overall university prestige. My results supported this hypothesis to a limited extent. Athletic success did associate with university prestige perceptions when controlling for variables that traditionally are indicative of academic achievement. However, once interaction variables were included in the model, the relationship between ASR and peer assessment was no longer significant. Additionally, the coefficients for both individual and combined athletic success rate measures were very small. This small effect size indicates that ASR might increase prestige, but might not be the most efficient method of doing so. I also hypothesized that ASR would associate with university prestige differently across different university types. My results did not support these hypotheses, as the different types of universities did not gain significantly different amounts of prestige from athletic success.

These results indicate that, through the halo effect, different university types gain prestige after achieving athletic success in the same way. Universities that are recently founded, secular, public, outside the Northeast region, and have less prestigious name indicators were each hypothesized to become more prestigious as a result of athletic success. These university types initially lack prestige, and have nowhere to go but up. As a result, they were expected to show the greatest gains in prestige. This was not the case, as the different types of universities did not gain different amounts of prestige from athletic success. Once interaction variables were added to the model, the relationship

between ASR and peer assessment was no longer significant. In other words, ASR did not associate with prestige any differently across the different university types.

These results add to a growing body of research explaining why highly successful and visible athletic programs are so important to the success of a prestigious university. Results indicate that athletic success improves how the general public perceives a university. In other words, schools that find themselves with successful athletic teams are seen as more prestigious. It is understandable, then, why so many universities in the United States concern themselves with obtaining and maintaining a successful athletic program image. Improved perceptions of the entire university as a result of a single institutional facet thriving is quite desirable. This suggests that the halo effect does function for universities, and can benefit them. As for profitability, while highly successful intercollegiate athletic programs may not generate a profit directly, the increased prestige they bring to the university may indirectly provide the school with funds and other resources. The increased commercialization that comes with this program success may not generate a profit in and of itself, but it may successfully advertise the school and increase student applications or alumni contributions (Toma 1999). It seems that successful athletic programs may not typically generate a profit but lead to other benefits which can, in turn, raise funds for the school.

For the most part, however, my hypotheses concerning university type were not supported. Of the five university types used in the final analysis, only the university age variable was significant. Thus, it may be possible that newly founded universities can gain prestige upon achieving athletic success. It is unlikely that the other four university types will have an impact on university prestige gained or lost. Consequently, athletic

programs for these types of universities do not directly impact prestige perceptions.

Finally, results indicate that the university prestige perceptions of those deeply involved in the world of academia agree strongly with those of non-experts. This lends additional credibility to the USNews and World Report's system of university rankings. Despite criticisms of subjective measurements of university academic quality, this result suggests that this method of measuring university prestige is effective.

Chapter 10: Conclusion

For universities and colleges across America, it is beneficial for school policymakers to understand if and how athletic success can impact university prestige. Prestigious status is a perception held by the public, directly resulting from university image and reputation. Athletics in American society have been growing steadily in popularity and importance in recent decades. This is especially true of college athletic programs. With increased commercialization and mass media attention, news of the success of an intercollegiate athletic program travels faster and farther than ever before. Athletic program success, achieving increased university visibility as the result of mass media attention and commercialization, is a potential way for a university to achieve prestigious status. Since the halo effect allows perceptions of athletic programs to be extended to all other aspects of the university, successful athletic programs bring prestige to the entire university.

Results in this study indicate that athletic success rate is somewhat associated with university prestige. While the relationship between athletic success rate and university peer assessment was significant and positive, the small effect size and weak relationship question the overall importance of the association. Intercollegiate athletic success may increase university prestige, but may be inefficient or impractical compared to other means. Relative to the amount of resources devoted to supporting and enhancing “big-time” college sports programs, the amount of prestige obtained may be trivial. Athletic success, however, still draws attention to the university, and may even possibly

benefit the school in other ways. This may explain why universities put so many resources into their athletic programs, despite monetary losses. These losses may be seen as down payments on future university image enhancements. Results also indicate that athletic success associates with university prestige to the same degree across different university types. While less-prestigious universities don't gain prestige to a greater degree than established universities, they do gain prestige from athletic success. This study shows the potential benefits these less-prestigious universities have to gain from founding a Division I sports team, and supporting its success.

Future studies should endeavor to use a measure of university athletic success that equally considers both football and basketball programs. There is no reason to place an emphasis on either football or basketball as both types of teams receive generally the same fanfare in the collegiate sports arena. Baseball programs could also be assessed, as they are valued by universities, yet rarely achieve a profit. What they contribute to the athletic success/university prestige relationship is currently unknown. When testing university types, a large sample of universities is necessary. Some university types with both Division I football and basketball programs are hard to find. A large sample of universities will ensure that many different university types can be studied. Next, researchers should consider that when typing universities, schools may covary on any number of characteristics. Schools in Southern regions may also be more religious, schools in the Northeast may also be older, etc. Rarely is any university one "type", and this should be considered when designing any study on this topic. Also, university types should only be selected for analysis if they do not add any unwarranted noise to the outcome. If possible, pre-testing various university types to control for noise or other

confounding variables is suggested. Additional research should concentrate on assessing whether prestige is the only perceptual benefit universities gain from successful sports programs. Perhaps merely calling attention to the university itself is a major benefit of athletic program success. The resulting perceptions, whether positive or negative, may be inconsequential. Finally, the current study only looked at the relationship between athletic success and university prestige at a single point in time. Future research should assess this relationship across time to determine how long the affects of athletic success last, and if a history of athletic success continually benefits university image and reputation.

Appendices

Table 1

Summary of Regression Analysis for Individual Football and Basketball Athletic Success Rates Predicting USNews and World Report's Peer Assessment Rating (N = 165)

Predictor	B	SE B	β	p
Basketball ASR	.004	.002	.092	.011**
Football ASR	.002	.001	.067	.076*
SAT 50 th Percentile	.030	.004	.560	.000***
Freshman in Top 10% of High school class	.090	.019	.350	.000***
Acceptance Rate	.005	.021	.016	.803

$R^2 = .816$

*Significant at .10 level ($p < .10$), **Significant at .05 level ($p < .05$), ***Significant at .01 level ($p < .01$)

Table 2

Summary of Regression Analysis for Individual Football and Basketball Athletic Success Rates Predicting USNews and World Report's Peer Assessment Rating Across Different University Types (N = 165)

Predictor	B	SE B	β	p
Basketball ASR	.003	.001	.075	.034**
Football ASR	.001	.001	.037	.335
SAT 50 th Percentile	.030	.005	.558	.000***
Freshman in Top 10% of High school class	.085	.020	.333	.000***
Acceptance Rate	.001	.021	.005	.942
Religious vs. Secular	-1.148	.952	-.053	.230
Private vs. Public	1.979	.894	.128	.028**
No Name Designation vs. Name Designation	-.862	.514	-.061	.095*
Northeast Region vs. Outside Northeast Region	-.418	.680	-.025	.540
Years Since University Founded	.014	.005	.109	.007***

$R^2 = .848$

*Significant at .10 level ($p < .10$), **Significant at .05 level ($p < .05$), ***Significant at .01 level ($p < .01$)

Table 3

Summary of Regression Analysis for Combined Football and Basketball Athletic Success Rates Predicting USNews and World Report's Peer Assessment Rating (N = 165)

Predictor	B	SE B	β	p
Combined ASR	.004	.001	.127	.000***
SAT 50 th Percentile	.030	.004	.564	.000***
Freshman in Top 10% of High school class	.092	.019	.360	.000***
Acceptance Rate	.011	.021	.033	.607

$R^2 = .815$

***Significant at .01 level (p < .01)

Table 4

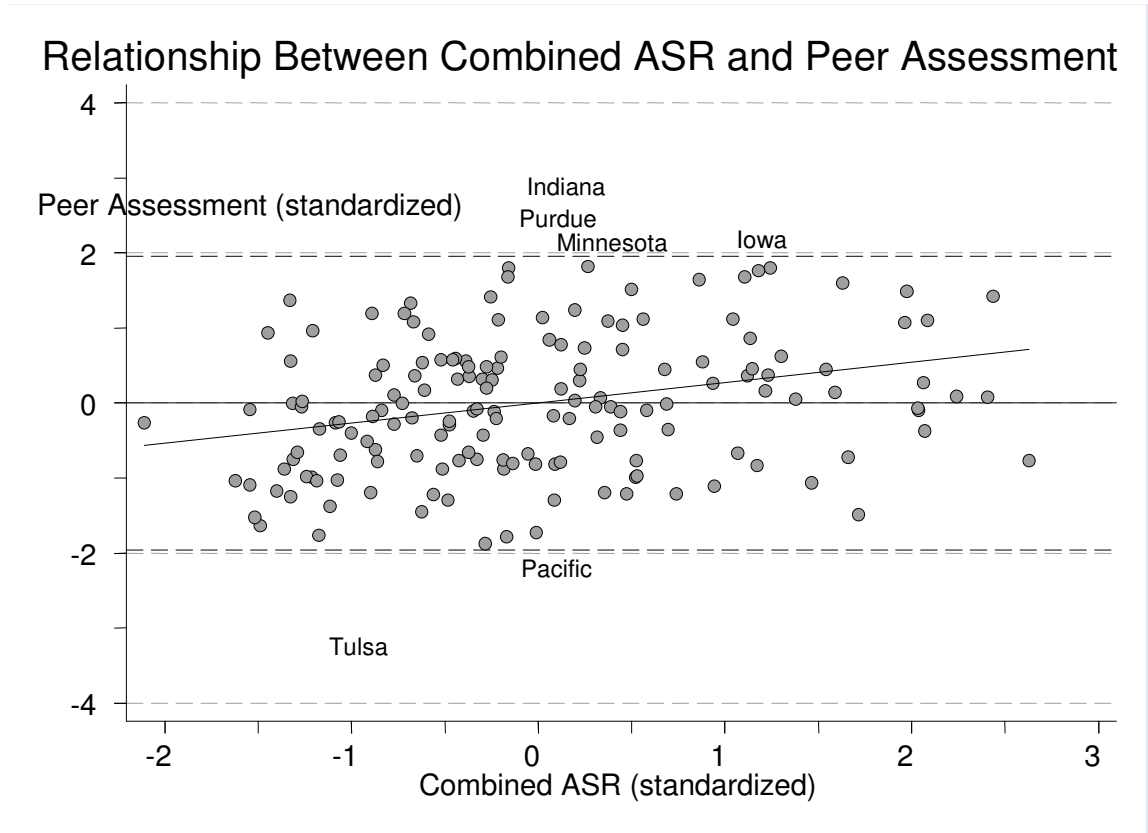


Table 5

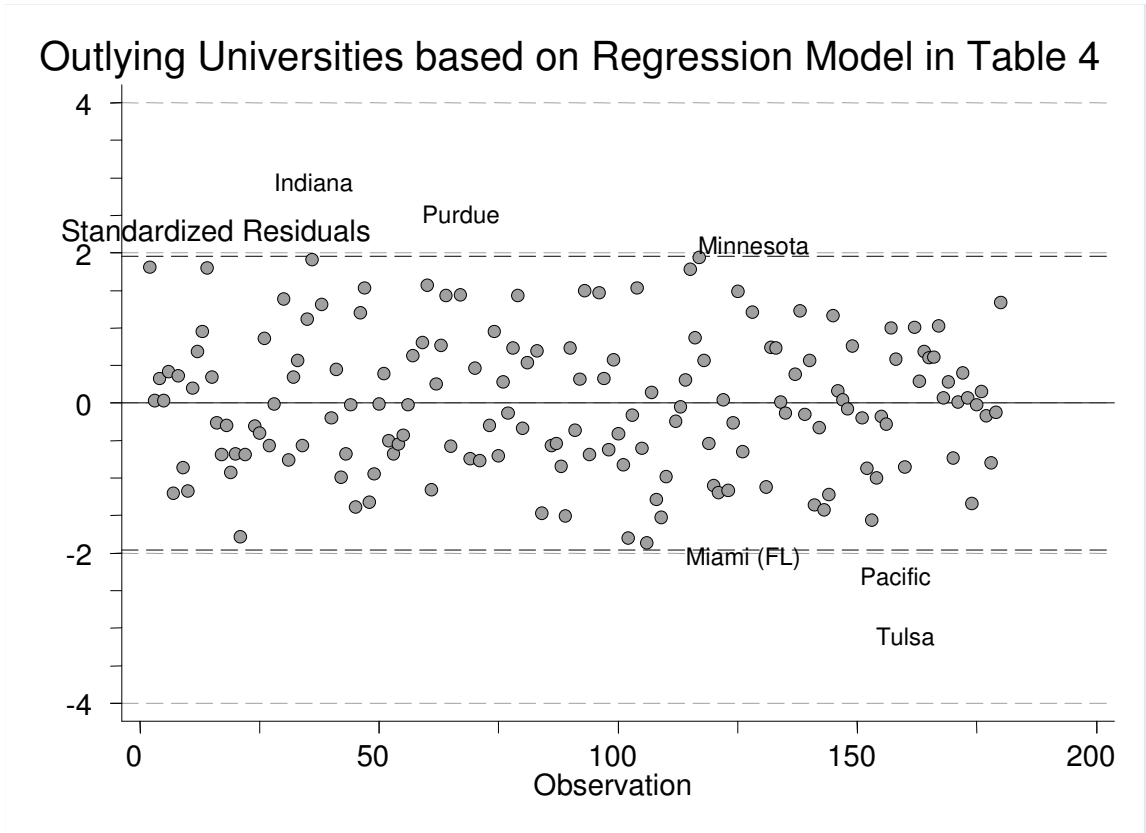


Table 6

Summary of Regression Analysis for Combined Football and Basketball Athletic Success Rates Predicting USNews and World Report's Peer Assessment Rating Across Different University Types (N = 165)

Predictor	B	SE B	β	p
Combined ASR	.003	.001	.095	.009***
SAT 50 th Percentile	.030	.005	.561	.000***
Freshmen in Top 10% of High school class	.086	.020	.336	.000***
Acceptance Rate	.003	.020	.011	.865
Religious vs. Secular	-1.127	.948	-.052	.236
Private vs. Public	2.054	.872	.133	.020**
No Name Designation vs. Name Designation	-.895	.508	-.063	.080*
Northeast Region vs. Outside Northeast Region	-.453	.664	-.027	.496
Years Since University Founded	.014	.005	.107	.008***

$R^2 = .848$

*Significant at .10 level ($p < .10$), **Significant at .05 level ($p < .05$), ***Significant at .01 level ($p < .01$)

Table 7

Summary of Regression Analysis for Combined Football and Basketball Athletic Success Rates Predicting USNews and World Report's Peer Assessment Rating Across Different University Types with Predictor Interaction Variables (N = 165)

Predictor	B	SE B	β	p
Combined ASR	.001	.005	.038	.809
SAT 50 th Percentile	.029	.005	.543	.000***
Freshmen in Top 10% of High school class	.089	.020	.348	.000***
Acceptance Rate	.001	.020	.004	.952
Religious vs. Secular	.766	2.012	.035	.704
Private vs. Public	.504	1.458	.033	.730
No Name Designation vs. Name Designation	-1.420	1.098	-.101	.198
Northeast Region vs. Outside Northeast Region	-.574	1.259	-.034	.649
Years Since University Founded	.017	.009	.133	.056*
Religious Status X Combined ASR	-.006	.005	-.097	.254
Private Status X Combined ASR	.004	.003	.158	.151
Name Designation Status X Combined ASR	.001	.002	.041	.593
Region Status X Combined ASR	.001	.003	.034	.760
Years Since Founded X Combined ASR	-1.511E-5	.000	-.082	.530

$R^2 = .856$

*Significant at .10 level ($p < .10$), ***Significant at .01 level ($p < .01$)

Appendix A

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Akron	239	259	22	970	12	82	
Alabama	393	553	31	1105	32	72	
Alabama A&M	191	0	18	870	.	43	
Alabama - Birmingham	548	0	29	1065	23	88	
Arizona	698	257	36	1125	34	88	
Arizona State	282	479	33	1045	27	91	
Arkansas	405	460	29	1145	32	87	45.88
Arkansas – Little Rock	219	0	23	.	.	.	
Auburn	273	728	31	1105	32	82	
Ball State	197	165	26	1040	14	80	
Baylor	184	202	32	1200	38	66	46.66
Bowling Green State	190	320	26	1010	14	90	
Brigham Young	409	397	31	1220	49	78	
Brown	153	0	44	1435	90	15	
Buffalo	195	107	31	1145	24	57	
California	375	591	47	1335	99	27	
California - Davis	107	0	37	1180	95	61	

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
California - Irvine	213	0	36	1210	98	60	
California – Los Angeles	614	534	43	1290	97	27	
California – San Diego	219	0	38	1260	99	44	
California – Santa Barbara	213	0	35	1205	96	53	
Central Florida	325	251	25	1140	35	62	49.00
Central Michigan	234	275	22	1010	15	75	
Cincinnati	449	344	28	1105	19	76	
Clemson	245	502	31	1225	45	57	59.95
Cleveland State	130	0	21	910	9	80	44.17
Colorado - Boulder	257	417	35	1165	22	88	
Colorado State	246	349	30	1105	17	88	
Columbia	148	0	46	1440	92	13	80.86
Connecticut	804	263	32	1185	37	51	57.15
Cornell	159	0	46	1385	81	27	
Dartmouth	120	0	44	1450	87	17	77.95
Dayton	378	0	25	1165	24	80	
Delaware	164	0	32	1205	37	47	

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Denver	177	0	27	1165	36	82	
DePaul	393	0	28	1125	19	71	
Drexel	230	0	29	1185	30	82	
Duke	757	134	45	1450	88	24	73.14
Duquesne	161	0	26	1125	28	80	
East Carolina	164	234	23	1035	14	74	
East Tennessee State	361	0	21	1045	18	81	42.38
Florida	779	707	36	1260	85	57	
Florida Atlantic	134	174	23	1050	14	55	
Florida International	149	114	23	1105	.	47	
Florida State	295	753	31	1160	26	62	59.92
Fordham	180	0	31	1215	39	50	
George Mason	342	0	30	1105	14	69	61.56
George Washington	377	0	35	1295	63	37	
Georgia	270	858	34	1230	52	65	
Georgetown	467	0	41	1390	86	22	
Georgia Tech	489	450	40	1345	66	68	
Georgia State	170	0	27	1085	.	50	
Hartford	160	0	24	1070	.	66	
Harvard	142	0	49	1490	96	9	97.75

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Hawaii	244	431	28	1100	25	68	
Hofstra	242	0	27	1150	24	62	
Howard	130	0	29	1140	21	44	54.57
Houston	236	331	27	1070	21	80	
Idaho	134	131	27	1065	20	82	
Idaho State	177	0	25	990	13	77	
Illinois - Chicago	249	0	32	1065	25	58	
Illinois State	194	0	25	1105	11	77	53.10
Illinois Urbana- Champaign	719	232	40	1280	48	75	
Indiana State	176	0	25	945	10	80	
Indiana - Purdue	255	0	29	995	9	74	
Indiana	462	192	38	1110	25	85	
Iowa	402	664	36	1125	22	84	
Iowa State	319	329	33	1125	24	90	
Jackson State	244	0	19	870	.	39	
Kansas	800	289	33	1125	28	74	
Kansas State	273	468	29	1105	32	62	
Kent State	311	160	26	1010	13	94	
Kentucky	844	277	30	1125	28	77	
Louisiana - Lafayette	166	206	21	1010	15	76	

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Louisiana Tech	203	201	23	1045	21	83	
Louisiana State	527	780	29	1125	25	73	
Louisville	586	622	26	1105	22	79	
Loyola - Chicago	200	0	29	1125	30	81	
Maine	176	0	27	1080	22	80	
Marquette	520	0	29	1205	34	70	
Maryland – Baltimore County	135	0	28	1215	30	71	
Maryland – College Park	540	473	37	1275	64	49	
Massachusetts	237	0	33	1140	19	80	
Memphis	681	334	24	990	18	71	
Miami (FL)	222	736	32	1260	62	46	
Miami (OH)	241	351	34	1120	41	69	
Michigan	326	828	45	1280	89	57	
Michigan State	640	352	35	1125	26	76	
Middle Tennessee State	214	242	21	1030	13	85	
Minnesota	321	492	38	1165	34	71	
Mississippi	207	375	27	1065	.	73	
Mississippi State	436	224	25	1065	26	69	

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Missouri	322	380	33	1165	27	89	
Missouri – Kansas City	172	0	25	1105	30	75	
Montana	281	0	28	1045	17	83	41.79
Montana State	207	0	26	1065	17	74	
Nebraska - Lincoln	286	588	31	1145	27	75	
Nevada – Las Vegas	404	158	25	1010	18	81	
Nevada - Reno	484	296	26	1060	.	86	
New Hampshire	123	0	29	1130	20	72	
New Mexico	328	356	29	1010	21	74	
New Mexico State	280	163	25	970	20	81	
New Orleans	183	0	22	970	11	63	
North Carolina – Chapel Hill	786	316	42	1300	74	37	
North Carolina State	489	434	31	1185	36	66	
North Dakota State	145	0	24	1065	18	84	
North Texas	206	357	24	1105	19	69	44.90
Northeastern	215	0	31	1235	36	47	
Northern Arizona	190	0	25	1070	17	86	

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Northern Colorado	92	0	23	1030	10	82	
Northern Illinois	162	321	24	1010	9	66	
Northwestern	180	277	44	1410	82	30	
Notre Dame	406	630	39	1380	86	32	
Oakland	217	0	21	1010	.	82	39.97
Ohio State	550	921	37	1185	39	74	
Ohio	273	200	31	1065	16	89	
Oklahoma	448	809	30	1165	37	86	
Oklahoma State	558	393	27	1125	27	88	
Old Dominion	352	0	27	1060	15	69	
Oregon	401	461	33	1117	25	90	
Oregon State	217	442	30	1080	18	89	
Pacific	397	0	26	1190	43	56	
Penn State	208	616	38	1200	40	62	
Pennsylvania	462	0	45	1430	94	21	
Pepperdine	190	0	31	1225	43	28	
Pittsburgh	620	448	35	1230	43	53	
Portland State	197	0	26	1050	.	92	
Princeton	276	0	49	1470	94	11	95.89
Purdue	369	477	38	1145	27	85	

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Rhode Island	239	0	28	1120	21	77	
Rice	219	190	41	1435	88	25	
Rutgers	218	323	34	1215	36	61	
Saint Louis	260	0	30	1205	36	78	
San Diego State	296	242	28	1080	.	44	
San Francisco	199	0	30	1125	17	72	
Seton Hall	326	0	28	1115	25	84	
South Alabama	242	0	21	1025	.	87	41.11
South Carolina	339	397	30	1165	26	68	
South Carolina State	274	0	22	860	8	69	
South Dakota State	112	0	23	1045	15	93	
South Florida	191	323	26	1120	23	58	
Southern California	307	917	39	1355	85	27	
Southern Illinois	561	0	26	1010	9	77	
Southern Methodist	192	151	32	1230	35	58	
Southern Mississippi	190	448	22	990	19	61	
St. John's (NY)	201	0	28	1060	18	63	
Stanford	495	259	49	1455	89	12	89.95

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Syracuse	699	314	34	1215	44	65	
Temple	268	120	29	1100	19	63	59.86
Tennessee	438	663	32	1165	34	74	
Tennessee State	167	0	21	890	.	43	
Texas A&M	364	418	36	1200	50	70	
Texas – Arlington	181	0	25	1050	20	79	
Texas Christian	185	525	27	1165	28	67	
Texas Southern	176	0	20	.	.	.	
Texas Tech	409	505	28	1130	22	71	
Texas - Austin	676	807	41	1235	68	51	
Texas – El Paso	323	274	24	915	17	99	
Toledo	242	367	23	1025	16	80	
Tulane	174	216	34	1340	65	45	
Tulsa	259	328	26	1205	63	75	
Utah	481	530	32	1085	27	85	
Utah State	432	144	27	1105	25	94	
Vermont	373	0	31	1165	21	80	
Virginia	330	494	43	1325	86	38	
Washington	442	326	39	1210	82	67	
Wisconsin - Madison	630	634	42	1340	63	68	

<u>University</u>	<u>Basketball ASR</u>	<u>Football ASR</u>	<u>Peer Assessment Rating</u>	<u>SAT 50th Percentile</u>	<u>Percent of Freshmen in Top 10% of High School Class</u>	<u>Acceptance Rate</u>	<u>Post- Test Rating*</u>
Wisconsin - Milwaukee	406	0	28	1030	7	81	
Wyoming	270	223	27	1065	20	95	
Vanderbilt	374	186	41	1370	77	35	
Virginia Commonwealth	358	0	28	1075	16	68	49.86
Virginia Tech	283	659	34	1200	37	72	67.59
Wake Forest	475	298	35	1335	61	39	
Washington State	250	438	30	1105	37	74	
West Virginia	384	637	28	1045	18	92	46.74
Western Michigan	278	225	25	1045	13	85	
Wichita State	352	0	24	1045	19	84	39.86
William & Mary	149	0	38	1350	79	31	
Wright State	253	0	23	970	15	87	
Yale	190	0	49	1490	95	10	97.21

“.” denotes missing value from USNews and World Report University ranking data

* Only 28 universities used in Post-Test

Appendix B

Descriptive Statistics

	Mean	Standard Deviation
Basketball ASR (1 to 1000)	317	165
Football ASR (1 to 1000)	235	248
Peer Assessment Rating (1 to 50)	31	7
SAT 50 th Percentile	1147	131
Freshmen in Top 10% of High School Class	38%	27
Acceptance Rate	66%	21
Post-Test Rating (0 to 100)	60	18

Appendix C

Prestige Perceptions

Instructions: For EACH of the following, please rate how *prestigious* you feel that university is on a scale of 0 (not at all prestigious) to 100 (extremely prestigious). Prestige here is defined as “a public reputation of respect and overall positive perceptions of academic quality”. Please rate each to the best of your ability even if you do not know much about the university. Your responses will be kept completely confidential.

Princeton University	_____
University of South Alabama	_____
George Mason University	_____
Cleveland State University	_____
Boston University	_____
University of North Texas	_____
University of Connecticut	_____
Oakland University	_____
Baylor University	_____
Duke University	_____
Florida State University	_____
Yale University	_____
Clemson University	_____
Illinois State University	_____
Howard University	_____
University of Montana	_____
University of Central Florida	_____
Wichita State University	_____
Harvard University	_____
Virginia Commonwealth University	_____
Stanford University	_____
Temple University	_____
Columbia University	_____
Virginia Tech	_____
University of Arkansas	_____
West Virginia University	_____
Dartmouth College	_____
East Tennessee State University	_____

References

- (No author). (2000, March 1st). Is It Worth It? *The Economist*, p. 57-58.
- Abbott, Walter F., and Henry M. Barlow. 1972. "Stratification Theory and organizational Rank: Resources, Functions, and Organizational Prestige in American Universities." *The Pacific Sociological Review*, 15(4): 401-424.
- Abbott, Walter and Calvin Schmid. 1975. "University Prestige and First-Time Undergraduate Migration in the United States." *Sociology of Education*, 48(2): 168-185.
- Abelson, Robert P., Aronson, Elliot, McGuire, William J., Newcomb, Theodore M., Rosenberg, Milton J., and Percy H. Tannenbaum. (1968). *Theories of Cognitive Consistency: A Sourcebook*, Chicago: Rand McNally.
- Blau, Peter. 1974. "Recruiting Faculty and Students." *Sociology of Education*, 47: 93-113.
- Brooks, Rachele L. 2005. "Measuring University Quality." *The Review of Higher Education*, 29(1): 1-21.
- Budig, Gene A. 2007. "An Athletic Arms Race." *Phi Delta Kappan*, 89(4): 283-284.
- Burris, Val. 2004. "The Academic Case System: Prestige Hierarchies in Ph.D. Exchange Networks." *American Sociological Review*, 69(2): 239-264.
- Carter, Allan M. 1966. *An Assessment of Quality in Graduate Education*. Washington DC. American Council on Education.

- Chevalier, Arnaud and Conlon, Gavan. Does It Pay to Attend a Prestigious University? (August 2003). IZA Discussion Paper No. 848. Available at SSRN: <http://ssrn.com/abstract=435300>
- Clarke, Marguerite. 2002. "Some Guidelines for Academic Quality Rankings." *Higher Education in Europe*, 27(4): 443-459.
- Cole, Jonathan R., and James A Lipton. 1977. "The Reputations of American Medical Schools." *Social Forces*, 55(3): 662-684.
- Cowley, W. H. 1999. "Athletics in American Colleges." *The Journal of Higher Education*, 70(5): 494-503.
- Duderstadt, James J. 2000. *Intercollegiate Athletics and the American University: A University President's Perspective*. Ann Arbor, MI: University of Michigan Press.
- Gibbs, N. (2006). Who Needs Harvard? *Time Canada*, 168(8), 24-32.
- Grimes, Paul W. and George A. Chressanthis. 1994. "Alumni Contributions to Academics: The Role of Intercollegiate Sports and NCAA Sanctions." *American Journal of Economics and Sociology*, 53(1): 27-40.
- Gump, Steven E. 2006. "Prestige and the University Press." *Journal of Scholarly Publishing*, 37(2): 69-85.
- Hill, Kathleen, Burch-Ragan, Kelly M., and Denise Y. Yates. 2001. "Current and Future Issues and Trends facing Student Athletes and Athletic Programs." *New Directions For Student Services*, 93: 65-80.

- Holbrook, Morris B. 1983. "Using a Structural Model of Halo Effect to Assess Perceptual Distortion due to Affective Overtones." *Journal of Consumer Research*, 10: 247-252.
- Jacobs, David. 1999. "Ascription or Productivity? The Determinants of Departmental Success in the NRC Quality Ratings." *Social Science Research*, 28: 228-239.
- Kealy, Mary Jo. and Mark L. Rockel. 1987. "Student perceptions of college quality: the influence of college recruitment policies." *Journal of Higher Education*, 58(6): 683-703.
- Kezar, Adrianna. 2004. "Obtaining Integrity? Reviewing and Examining the Charter between Higher Education and Society." *The Review of Higher Education*, 27(4): 429-459.
- Kraatz, Matthew S., and Edward J. Zajac. 1996. "Exploring the Limits of the New Institutionalism: The Causes and Consequences of Illegitimate Organizational Change." *American Sociological Review*, 61(5): 812-836.
- Landrum, R. Eric, Turrisi, Rob., Clayton Harless. 1998. "University Image: The Benefits of Assessment and Modeling." *Journal of marketing for Higher Education*, 9(1): 53-68.
- Lovaglia, Michael, and Lucas, Jeffrey. 2005. "High-Visibility Athletic Programs and the Prestige of Public Universities." *The Sport Journal*, 8(1): 1-5.
- Lucas, Jeffrey, and Michael Lovaglia. 2005. "Can Academic Progress Help Collegiate Football Teams Win?" *The Sport Journal*, 8(3): 1-3.

- Matheson, Victor A. 2005. "Athletic Graduation Rates and Simpson's Paradox." *Economics of Education*, 26(4): 516-520.
- McAllister, Matthew P. 1998. "College Bowl Sponsorship and the Increased Commercialization of Amateur Sports." *Critical Studies in Mass Communication*, 15: 357-381.
- Mixon, Stephanie L., Lyon, Larry, and Michael Beaty. 2004. "Secularization and national Universities." *The Journal of Higher Education*, 75(4): 400-419.
- Moogan, Y. J. and S. Baron. 2003. "An Analysis of Student Characteristics within the Student Decision Making Process." *Journal of Further and Higher Education*, 27(3): 271-287.
- Morse, Robert J. and Samuel Flanigan. 2007. "How we do the Rankings." *USNews and World Report's America's Best College's*, 77-79.
- Pascarella, Ernest T., Truckenmiller, Rachel, Nora, Amaury, Terenzini, Patrick T., Edison, Marcia, and Linda Serra Hagedorn. 1999. "Cognitive Impacts of Intercollegiate Athletic Participation." *The Journal of Higher Education*, 70(1): 1-26.
- Sine, Wesley David, Shane, Scott, and Dante Di Gregorio. 2003. "The Halo Effect and Technology Licensing: The Influence of Institutional Prestige on the Licensing of University Inventions." *Management Science*, 49(4): 478-496.
- Spring, Joel H. 1974. "Mass Culture and School Sports." *History of Education Quarterly*, 14(4): 483-499.

- Suitor, J. Jill, Powers, Rebecca S., and Rachel Brown. 2004. "Avenues to Prestige Among Adolescents in Public and Religiously Affiliated High Schools." *Adolescence*, 39(154): 229-241.
- Tatar, Moshe. 1995. "The Prestige of the High School as Viewed by Parents." *British Journal of Sociology of Education*, 16(1): 93-108.
- Toma, J. Douglas. 1999. "The Collegiate Ideal and the Tools of External Relations: The Uses of High-Profile Intercollegiate Athletics." *New Directions for Higher Education*, 105: 81-90.
- Tucker III, Irvin B. 1992. "The Impact of Big-Time Athletics on Graduation Rates." *American Economic Journal*, 20(4): 65-72.
- Tucker III, Irvin B. 2004. "A Re-Examination of the Effect of Big-Time Football and Basketball Success on Graduation Rates and Alumni Giving Rates." *Economics of Education Review*, 23: 655-661.
- Watt, Sherry K. and James L. Moore III. 2001. "Who Are Student Athletes?" *New Directions For Student Services*, 93: 7-18.
- Whitehead, John S. 1986. "Southern Universities: Are They Rising?" *History of Education Quarterly*, 26(4): 553-568.