A Comparison of Traditional versus Athletic Variables for Predicting College Student-Athlete GPA.

*James Johnson, Ball State University*

**Abstract 2011-006**

**Thursday, June 2, 2011**

8:30 AM 20-minute oral presentation (Room 322)

On August 1, 1986 Proposition 48 was adopted by the NCAA and mandated athletically eligible college student-athletes have minimum standardized test scores and high school GPAs. This landmark legislation set off a wave of research investigating whether the minimum GPA requirements for college student-athletes were appropriate. Similar to the legislation that brought about Proposition 48, the most recent NCAA academic reform package was enacted in 2004 and included the Academic Progress Rate (APR). The APR is a team score generated by individual student-athlete eligibility and retention points. In essence, if students are academically eligible and returning to their institutions each semester, the APR scores are high. Penalties for historically low APR scores could include loss of scholarships or post-season play for underperforming teams (Brown, 2005). The APR has rekindled GPA research due to its obvious link to eligibility and potential team penalties.

Beyond APR scores, GPA can influence a variety of other areas in a student-athlete's life. Scholarships and financial aid often have GPA requirements. Coaches may use high school GPA to evaluate recruits, or they may use college GPA of a current player to make judgments about dedication to academics or individual awards. Additionally, transfer students must meet minimum GPA requirements to be eligible. Furthermore, GPA cut-off scores may determine who, and what types of academic support services are available to particular student-athletes. These uses for GPA, combined with eligibility and APR scores, demonstrate the wide-ranging impact GPA has on student-athletes. Therefore, identifying which variables impact GPA is valuable to all stakeholders associated with college student-athletes.

Simply reexamining traditional demographic (e.g., race, gender, etc.) and academic (e.g., test scores, high school information, etc.) predictors of college GPA was not the goal of this study. In an attempt to take GPA research one step further, four variables unique to student-athletes were investigated. First, the type of sport team on which a student-athlete participates has been linked to both GPA and graduation rates. Specifically, the revenue sports of football and men's basketball have continually demonstrated the lowest academic achievement of all sports (NCAA Research Staff, 2008). Additionally, APR scores are lowest for revenue-producing sports (Academic Progress Rate, 2009; NCAA Research Staff, 2009). Second, coaching change is a logical choice as a potential influence on GPA due to the vast amount of interaction and oversight a college coach provides their student-athletes (Field, 1991; Giacobbi, Roper, Whitney, & Butryn, 2002). Playing time was the third non-traditional athletic variable chosen with a potential link to student-athlete GPA. High school athletes who are good enough to play in large college programs did not have to worry about their high school participation. They were likely the best players on their team. This level of skill creates an identity heavily dependent on athletic status (Melendez, 2006). Finally, team winning percentage is a uniquely athletic variable that may impact GPA. If the old cliche is true, and there is no I in team, then it can be assumed student-athletes may be more impacted by team performance than their individual playing time. Previous research is inconclusive on the effects of team performance on GPA, but it is clear the winningest revenue sport teams perform at the lowest levels (Institute for Diversity and Ethics in Sport, 2008; Institute for Diversity and Ethics in Sport, 2009), while other more academic institutions see little evidence of a link between winning games and academic success (Akker, 1995; Kotlyarenko & Ehrenberg, 2000).

A sample of 674 first-year student-athletes at a NCAA-member, mid-sized, Midwestern university were examined each year over a five-year period (2004-2008) to determine if athletic variables were powerful enough to be used in conjunction with traditional predictors of college success to predict GPA. The four specific athletic variables unique to student-athletes (i.e., sport, coaching change, playing time, team winning percentage), were hypothesized to be as predictive as traditional variables (i.e., gender, race, distance from home, major, test scores, high school GPA, high school rank, high school size). Pearson correlations revealed student-athletes were more likely to earn a high first-year GPA if they were female (r = .35), Caucasian (r = -.33), scored well on standardized tests (r = -.47), had a respectable high school GPA (r = .64), were ranked high in their graduating high school class (r = -.58), had a relatively large high school graduating class (r = .15) were not undecided about major (r = -.11), were not a member of a revenue sport (r = .33), and earned a considerable amount of playing time in their first year (r = -.15). Least squares linear regression demonstrated the traditional variables of gender (B = .16), race (B = -.26), standardized test scores (B = .03), high school GPA (B = .41), high school rank (B < -.01), and size of high school graduating class (B < .01) were most influential in predicting first-year student-athlete GPA.

The results reinforced the powerfullness of traditional variables to predict college academic performance. However, two uniquely athletic variables proved to be significantly correlated to first-year GPA (i.e., sport and playing time). This finding suggests individuals invested in student-athlete academic success should be keenly aware that participating in a revenue sport and receiving a low amount of playing time are negatively related to student-athlete GPA. The practical importance of the athletic...
variables is clear and viable; after utilizing traditional variables to make predictions about first-year GPA, added concern should be placed on any student-athlete involved in a revenue sport and receiving a low amount of playing time. Utilizing these variables unique to student-athletes, in combination with traditional predictors of GPA, to create a more comprehensive student-athlete profile can aid college coaches and administrators when making decisions about recruiting, academic support, and athletic participation.