The Tools of the Trade: Examining Organizational Effectiveness in Division I BCS College Football Programs

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The sport of college football has grown to a societal magnitude that cannot be ignored. No longer is the sport merely an extracurricular activity for university students, but a multi-million dollar entity that generates both economic and social capital alike. Because of this stakes have never been higher in college football for players, coaches, and administrators. High school football players are ranked at their positions, and coaches are evaluated on their ability to recruit these star players. It is then the coach's job to convert these players in to a cohesive winning team that is successful on the field. The coach too has the responsibility to develop their recruited players, and for a select few, prepare to play professionally in the NFL.

This research aims to examine the organizational effectiveness of Division I Bowl Championship Series (BCS) collegiate football programs. Organizational effectiveness is defined as the measurement of how effective of an organization is at achieving its desired outcomes. In this research it was assumed that all Division I BCS college football programs desired the following: 1) success on the field of play (wins, RPI, and BCS Bowl invites) 2) develop players in to NFL talent and 3) recruit highly ranked high school players.

Winning in college football is a factor that all coaches are aware of, and one that has been proven in the literature to be a primary contributor to job retention (Holmes, 2011). When coaches perform poorly and subsequently lose their job this has been found to affect the ability of programs to bring high quality recruits. Hersch (2012) has found that not only does this coaching change affect the quality of recruits brought to the program, but also affects the future quality of play of those players already recruited. Players regularly choose programs because of the 'fit' and style of the coach; when there is a coaching change however, a player's performance declines. This decline in performance has been found to decrease a future NFL player's draft position, and results in a subsequent decrease in earnings (Hersch, 2012). With regards to the desire to pursue highly ranked high school talent a cyclical relationship has been found. Langlett (2003) found that if a given college football program was successful at recruiting a highly ranked class of high school talent subsequent increases in overall team performance would follow. The relationship recycles itself in that overall team performance has a direct effect on a program's ability to recruit highly ranked high school talent. What further confounds the cycle is the lack of awareness of which elements actually contribute directly to college football effectiveness. For instance Herda et al (2009) found mixed results when examining the connection between recruiting rankings and NCAA Division I football success. Further, while Orszag and Orszag (2005) found no connection between football expenses and short-term success, Mirabile and Witte (2011) found that also while predicted football expenditures did not predict on-field success, unpredicted football expenditures were connected with a greater probability of winning.

With these factors in mind the goal then became to further explore which program resource variables could significantly predict performance outcome variables. Data were collected on program resource variables established before in extant literature. First, to assess the quality of football players coming into each program, recruiting rankings were obtained from the leading recruit ranking database in college football at www.Rivals.yahoo.com. From there, overall recruit points, and annual totals of three-star recruits, four-star recruits, and five-star recruits were obtained for each team in the Rivals ranking between the years of 2002-2013 (N=69). For additional analyses, and because the these recruits would be expected to develop and matriculate into on-field production at different rates, three, four, and five year window totals were calculated for each program on overall recruiting points, three-star recruits, four-star recruits, and five-star recruits. Second, annual data were collected on operational expenses of each football program, operational expenses per player, football revenue, and overall total expenditures from the

Integrated Postsecondary Educational Data System (IPEDS) from the United States Department of Education. For annual performance outcome variables, data were gathered on NFL draft picks for each year, first round NFL draft picks, All-American selections each year, annual Academic Performance Ratings (APR) from the NCAA. Further team performance outcomes were obtained for each year regarding Bowl Championship Series (BCS) final points, BCS game participation, bowl game participation, win/loss records for each year, end of year Sagarin point, and annual Ratings Percentage Index (RPI) point values.

To explore any predictability from resource variables to performance outcome variables, a series of multiple regression analyses were constructed by placing resource variables into each regression in a stepwise entry method. Results intimated a low-level of uniformity in being able to connect resources (e.g. spending on the program or bringing in high recruits) with particular performance outcomes. However, certain findings did seem intuitive to the current way of thinking. For instance, the amount of four star recruits over the previous five years were the only significant predictor for participating in a BCS game ($\beta = .23$, $p<.01$). To win a BCS game, however, more talent and individual performance rankings were needed, though, with All-American selections ($\beta = .27$, $p<.001$), five star recruits over the previous three years ($\beta = .39$, $p<.01$), and four star recruits over the previous three years ($\beta = .32$, $p<.05$) significantly predicting the outcome. At a lesser elite level of performance (here, bowl game participation), results were oriented differently with academic performance of the teams ($\beta = .16$, $p<.05$), All-American selections ($\beta = .18$, $p<.05$), operational expenses each year ($\beta = 0.84$, $p<.05$), and total football program expenditures ($\beta = .29$, $p<.05$) were significant predictors. Similarly, winning a bowl game each year seemed to require academic performance of the teams ($\beta = .17$, $p<.05$), operational expenses per player ($\beta = 1.25$, $p<.01$), operational expenses each year ($\beta = 1.60$, $p<.001$), and total football program expenditures ($\beta = .35$, $p<.01$).

Ultimately, while results here were not yet definitive, these results do add some important insight into the intense, high-pressure landscape of big-time college football. With millions and millions of dollars exchanged every season, efficient usage of resources would allow for additional programs to achieve success. Our results suggest that high-level success (i.e. high rankings in the BCS, winning BCS games) require talent in the form of high-quality recruits, where spending levels had not effect. Conversely, it appeared that spending levels and spending increases would exist as a viable method for football programs to invest in probable success and to achieve on-field success that would merit a bowl game invitation.