Evaluating the Evaluators: Developing an Instrument to Assess Baseball Scouts’ Effectiveness

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Behind every player stands a scout and a story of discovery” (BaseballHall.org, 2014). The practice of evaluating player attributes and performance in an attempt to predict their future production is nearly as old as American professional sport itself. Since the early 1900s, professional baseball teams have employed scouts to scour high schools, towns, colleges, and the Minor Leagues to identify premier talent that would improve the future outlook of their organizations. Today, Major League Baseball (MLB) teams each have a network of professional and amateur scouts in every part of the country as well as in several regions around the world (BaseballAmerica.com, 2014). Scouts provide significant information to teams through “scouting reports,” which are written or electronic evaluations of players. Such reports include current evaluations as well as projections of future player performance. Scouting reports assist an organization in evaluating players for possible trades, free agent acquisitions, to determine when to call up a player from the Minor League system, or to determine which amateur players to draft into the system. Player evaluation is a daunting task and scouts have been referred to as the backbone of a professional baseball organization (Dragseth, 1999).

Yet, despite the critical role that scouts play in predicting the future success of their teams, there has been little formal evaluation implemented to assess the performance of scouts. MLB teams do not currently possess an instrument for evaluating the accuracy with which scouts predict the future MLB productivity of players. At this time, the process of evaluating the performance of scouts is much more of an art than a science. Thus, this research focused specifically on quantitatively assessing the ability of scouts to provide predictive evaluations of talent. By drawing connections between scouting data and the eventual MLB performance of a specific set of players, the goal of this project was to establish connections leading toward the establishment of a tool for evaluating the performance of baseball scouts. Such a tool would provide utility to MLB organizations by enabling them to make more informed decisions with regard to player personnel.

MLB franchises are complex and multi-tiered organizational systems with multiple subunits, with each expected to contribute toward the organization’s ultimate goal of winning World Series championships. Drawing upon systems theory in an organizational context (Kast & Rosenzweig, 1972), which describes the interdependence of relationships and interactions between subunits within organizations that contribute toward the achievement of common organizational goals, this research provides a first step in the evaluation of contributions provided by one of these organizational subunits in an MLB organization, by examining the accuracy of ratings provided by player evaluators. This should be an essential practice, since teams with reliable scouting performance will be more likely to benefit from high-caliber talent at all levels within their organizations, creating an increased likelihood of success at the MLB level compared to their competition.

Using data obtained from one MLB organization, a sample of nine players was used to provide the data for analysis. These players were selected from the limited pool available, as they satisfied three key conditions. First, they had no prior MLB experience at the time they were scouted. Secondly, they eventually accrued more than one year of playing experience at the MLB level. Lastly, they received evaluations by at least two organizational scouts. Data for these nine players was provided on the 20-80 scale, rumored to have been developed by Branch Rickey six decades ago (Ball, 2013) and officially adopted by the MLB scouting bureau in 1974 (Siegel, 2014; MLB.com, 2014). The scouting data used in this study provided multiple scouts’ evaluation of each player using four indicators: current batting ability, current power, predicted future batting ability at the MLB level, and predicted future power at the MLB level.
Data were normalized to enable analysis of all variables on the same scale, and were analyzed using multiple linear regression. Using actual MLB performance in both hitting and power as dependent variables, the predictive effects of scouts’ current and future player ability assessments in each of these two areas of production were considered. Also, additional analyses were conducted using alternate dependent variables derived from modern sabermetric indices for each form of batter performance: batting average on balls in play (BABIP) for hitting and, for power, isolated power (ISO), which is described as how often a player hits for extra bases and thus is regarded as a measure of a hitter’s raw power (Fangraphs.com, 2014).

Results demonstrated that scouts’ predicted ratings on players’ future batting ability was significantly and negatively related to players’ actual batting performance at the MLB level (B= -.583, t=-2.760, p=.008), while scouts’ predicted ratings on players’ future power was significantly and positively predictive of players’ demonstrated power at the MLB level (B=.539, t=2.364, p=.022). Neither rating on player ability at the time of evaluation (current batting or current power) was significantly related to actual MLB performance in each category; however, both the present and future power ratings were significantly tied with players’ ISO production at the MLB level (BPresPwr=-.442, t=-2.131, p=.038; BFutPwr=.774, t=3.929, p=.000).

The implications of this research are substantial with respect to the professional baseball industry. With player payrolls for MLB teams in the hundreds of millions of dollars (Associated Press, 2014), the importance of evaluating scouts’ ability to bring talented personnel into their organizations cannot be underestimated. This study constitutes a first step toward understanding the contributions that scouts make to the eventual success of the teams that employ them. As this research continues, our goal is to create a usable metric that provides organizations with a quantifiable way to determine if a scout is providing sufficient value to their organization. In addition, such a tool would have the potential to provide organizations with the ability to provide training for scouts, helping to improve their evaluations. Ultimately, teams that are able to distinguish high-performing scouts from the overall pool will, over time, develop an advantage over their competition as a result of their ability to identify the best talent more regularly and efficiently.