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Tastes for True Talent:

How Professional Baseball Scouts Define Talent and Decide Who Gets to Play

A DISSERTATION SUBMITTED TO THE FACULTY OF THE COLLEGE OF EDUCATION, LEADERSHIP, AND COUNSELING OF THE UNIVERSITY OF ST. THOMAS

ST. PAUL, MINNESOTA

By

D. Scott Gines

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF EDUCATION

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UNIVERSITY OF ST. THOMAS. MINNESOTA

Tastes for True Talent:

How Professional Baseball Scouts Define Talent and Decide Who Gets to Play

We certify that we have read this dissertation and approved it as adequate in scope and quality. We have found that it is complete and satisfactory in all respects, and that any and all revisions required by the final examining committee have been made.

Dissertation Committee

Thomas Fish, Ed.D., Committee Chair

Sarah Noonan, Ed.D., Committee Member

Steve Emerson, Ed.D., Committee Member

Final Approval Date

Abstract

A growing body of research focuses on talent identification as a critical building block in the process of talent development. Professional baseball scouts' level of expertise in identifying baseball talent directly impacts organizations' competitive success at the Major League level, yet the performance productivity of MLB franchises' draft selections fails to generate a positive rate of investment return. This qualitative, phenomenological study examined how 13 veteran, professional baseball scouts define player attributes and make decisions to identify or eliminate prospects. My analysis of participants' in-depth, reflexive interviews employed the theoretical lens of reflective knowledge (Schon, 1983), talent development (Bloom, 1985; Csikszentmihalyi, Rathunde, and Whalen, 1993), and performance expertise (Ericsson, 1993; 1996; 1998; 2007, June; 2009). My findings outlined a three-stage talent identification model and uncovered three trends found within professional baseball scouts' talent identification mindsets and prospect decision-making. First, scouts' dispositional mindset influences comparative recall and visual knowledge. Second, the makeup traits of competitive adaptability, extra effort, instinct and intellect are highly valued. Third, guess, gut, and instinct integrated with visual knowledge and valued makeup traits direct scouts' player selection decisions. These outcomes clarify the sources of scouts' talent identification knowledge, their preferred prospect attributes, and their player selection tendencies. In response to these findings, I recommended six benchmarks that frame the cognitive fundamentals of effective baseball scouting. These fundamentals provide a framework directed toward increasing MLB franchises' net yield for successful Major League player identification, selection, and development.

Key Words: professional baseball scout, talent identification, performance expertise, intuition, repertoire, visual knowledge

Acknowledgements

Eldridge (2010) asks the question – who can give a man his name? Over time I am blessed to answer to the names of "husband," "son," "father," "brother," and "coach." Other titles (and nicknames) exist, but the completion of this study grants me the privilege to assume a new name (title, really) that I never anticipated.

I read John Wooden's *They Call Me Coach* (1971) at the age of 13, and growing up across the street from three college head coaches and an athletics director I set my sights to become one of them. I doggedly pursued this vision, and those personal goals later became reality.

What unfolded without closure was the pursuit of an Ed.D in sport psychology at the University of Virginia (1983-87). Although incomplete (ABD), my advisor (Dr. Bob Rotella) transformed my understanding of athletic performance expertise and coaching leadership. Bob served as a reader in this project, but I am most grateful for the interpretive seeds of performance psychology and the questioning mind he cultivated in me so long ago.

This educational pursuit nearly unfolded without closure and resulted in a second ABD. Thank you to Dr. Sarah Noonan for an unanticipated outreach in 2015, and for her candor, zeal, and persistence in getting me "unstuck" on this topic and moving forward with clarity. To my chair, Dr. Tom Fish, I convey my deepest gratitude and sincere appreciation for agreeing to take me on and for shepherding me through with his even-keeled demeanor and insightful guidance. Sincere thanks to our committee "draft pick," Dr. Steve Emerson, for his keen insights and permeating questions – it proved so valuable to have a baseball mind at the table.

This study is born of personal experiences, a sincere passion for talent identification, and the leadership influence of "brothers in baseball" too numerous to name. I am proud to share that on 10 occasions Division I baseball programs were or are led by one of my former assistant coaches or players. Special thanks to Joe, Marlin, and Terry for helping "Gunny" connect with scout participants. I am so exceedingly proud of each of you - for the work you do and the calling you live every day.

Thank you to my 13 scout participants – this is about you. I hate that circumstances do not allow me to acknowledge you publicly by name, but please know that my gratitude overflows and in my perspective you lead lives of great significance. Well done!

One of the most shaping and transformational experiences of my "baseball life" encompassed 27 years as the co-director of the Virginia Baseball Camps, Inc. The blessings are so profuse and the relationships so cherished, words are inadequate. However, the brotherly love, guidance, and wisdom of Dennis Womack, the man who first hired me, took a chance on me as a college assistant, and later camp director, swells my heart with thanksgiving. God put you in my life, Dennis, and I am eternally grateful. Camp gratitude is not complete without acknowledging the influence and expertise of our longest-tenured instructor, C. "Bubba" Dorman. A rock, a man of God, and a beacon of baseball insight few ever achieve. Thank you, brother.

This is long, but so is my doctoral journey. I take permissive license as author. This process began before the deaths and the births of many. It began before the births of our children (Patrick and Kelly). The insufficiency of words coalesces here, and my wife, Ginger, stands at the point. How do I say "thank you" for faithfully persisting through the journey of coaching nearly 1,000 college baseball games, directing almost 100 sessions of camp, and enduring my

cumulative years of evaluating prospects on the road. One of your cards is ever-present on my desk, and the inside reads: "You are all that I want, and more than I deserve. I love you." I often find those words hard to believe about me, but it so accurately describes the affections of my heart for you. In the spirit of scouts' "tastes for true talent," you are my greatest scouting discovery (God directed me) and overachievement in my life (Hall of Fame). We can now check this educational pursuit off my "list" and attune our hearts to how God wants to expand our territory in the next chapter of our life. Carpe Diem.

DSG

April 8, 2017

TABLE OF CONTENTS

INTRODUCTION	1
Problem Statement, Significance, and purpose	3
Research Question	6
Definition of Terms	7
REVIEW OF THE LITERATURE	13
Evolution of the History of Professional Baseball Scouts	
Baseball Talents, Tools, an Attributes	
The Arm	
The Legs	
The Power	
The Fourth Attribute: Love for Playing the Game	
Tastes for Talent	
Nature v. Nurture Debate	
Defining, Identifying, and Probing the Presence of Talent	
Tastes for Talent in Sport	
Summary	
Gaps in the Literature	
Gap #1: Visual Identification and Forecasting Expertise in Baseball	
Gap #2: Assessing Psychological Attributes in Baseball	
Analytical Theory	
Bloom: Development of Talent	
Csikszentmihalyi, Rathunde, and Whalen: Complexity and Talent Development	
Ericsson: Deliberate Practice and Performance Expertise	
Schon: Knowing and Reflecting in Action	
METHODOLOGY	78
Qualitative Research	
Phenomenology	
Research Plan Details	
Setting	
Recruitment and Selection of Participants	
Ethical Considerations and Confidentiality	
Data Collection Methods	
Data Analysis	
Validity and Reliability in Qualitative Research	
TALENT DEFINITIONS AND PROSPECT JUDGMENTS	
Scout Dispositions	
Field Observation	
Physicality and Tools	
Confident Movements	
Comparative Recall	
Prospect Research	115

Homework Questions	116
Makeup Reasoning	
Valued Makeup Traits	131
Competitive Adaptability	131
Extra Effort	137
Instinct and Intellect	142
Projecting Expert Performance	146
Fit and Readiness for Rigor	146
Time to Develop	150
Tools and Makeup Composite	153
Player Selection	160
Information Gathering	160
Guess, Gut, and Instinct	164
TASTES FOR TALENT ANALYSIS	
Baseball Talent Identification and Player Selection Model	169
Visual Knowledge	170
Dispositional Mindsets	171
Comparative Recall	175
Valued Makeup Traits	177
Competitive Adaptability	178
Extra Effort	180
Instinct and Intellect	182
Player Selection	184
Concluding Analysis	188
SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS	191
Recommendations for Effective Baseball Scouting	191
"Like Players, Because Somebody Has to Play"	192
Distress Illuminates – Does What Come Next Adaptively Flow?	193
Own Your Vision, Recall, and Instinct	195
Perpetually Ask Two Questions: Why and What If?	196
"You Can't Work With Laziness"	
Meaning of Baseball Talent Identification = Sum of Measurements, Movement	ıts, Makeup,
Myths, and Misses	
Limitations of this Study and Recommendations for Future Research	202
Conclusion	203
REFERENCES	205
APPENDIX A: Script for Participant Recruitment E-Mail	212
APPENDIX B: Participant In-Person Interview Reminder E-Mail	
APPENDIX C: Review Typed Transcript E-Mail	
APPENDIX D: In-Person Interview Questions	
APPENDIX E: Consent Form	

CHAPTER ONE: INTRODUCTION

This study concerns the player attributes professional baseball scouts utilize when they make decisions to identify or eliminate Major League prospects. My career history spans 34 years in collegiate athletics, and my personal experiences as a former NCAA Division I baseball coach and player fueled my interest in this topic. For 17 years I scouted the Mid-Atlantic region as both an assistant coach and a head coach, and for 27 years I directed an instructional showcase camp for college and professional baseball prospects. Along the way, I coached 35 former players who received the call to play professionally and four advanced to the Major Leagues. Although my career in baseball is lengthy, coaching over 800 collegiate games and directing nearly 50 showcase camps, I continue to question why defining baseball talent and forecasting a prospect's potential to become an expert performer proves so difficult to discern.

Over a period of 13 years, I led two collegiate baseball programs that had no championship history while scouting with scholarship pools one-fourth the equivalent of many of my competitors. My programs did not initially have the reputations or resources of my in-state and conference opponents, but I needed to identify and sign prospects with the potential to become great college players and elevate team success to new heights. These challenges prompted me to re-evaluate my talent identification schemes and style of play so I could sign niche players for less scholarship aid while successfully competing against established programs. This experience, much like my playing career, pushed me to look deeper into the player attributes that lead to expert baseball performance.

My history as an aspiring professional baseball player began in Little League and continued through college. I made my college team through a walk-on tryout (i.e. for non-recruited players), and I became a four-year starter, batting champion, and scholarship player on

a perennial losing team. After graduation I played briefly oversees and later participated in a 1984 U.S. Olympic team tryout as a third baseman (the position I played in high school and college). In that tryout my radar gun readings reached 90 mph, and I subsequently received personal pitching tryouts with the Cincinnati Reds and the Milwaukee Brewers, reaching Major League average velocity in both auditions. Although I did not play a day of professional baseball, later reflections about my playing career taught me that years of intense practice increased the speed and power ratings of my throwing arm to Major League average; however, I failed to fully recognize the value of playing free of expectations and trusting my training until after I completed my playing career.

Speed and power measurements are visible and easily gauged by radar guns, stop watches, and home runs, and my scouting experiences enlightened me to how safe and easy it is to become infatuated with these quantifiable assessments compared to making a focused effort to investigate a prospect's baseball instincts and mindset. This mindset might include a prospect's self-confidence, game intelligence, commitment to focused training, willingness to accept performance feedback, and ability to maintain composure and make adjustments in a game laden with low percentages of success. When presented with precise measures of physical speed and power, how do professional baseball scouts define and what value do they place on subjective evaluations of a prospect's mindset? Because professional baseball scouts spend extensive time making field observations and notes - and observation is a component of visual knowledge - I wonder how scouts make meaning of what they see and how they forecast potential.

My study focuses on discovering how professional scouts define their tastes for talent with the goal of mapping how scouts make decisions when identifying potential in Major League prospects. In effect, how does a scout's mindset interpret the mindset of a Major League

prospect? I plan to chronicle the decision-making processes of professional baseball scouts to uncover how they define talent and potential when identifying and eliminating prospective Major League players.

Problem Statement, Purpose and Significance

As human beings we crave certainty, and nearly every business and organization operates with in-house rules. The "in-house" rules of professional baseball are referred to as "The Book," a term used to represent the game's historical rules of thumb, and it serves as an anecdotal guide outlining how the game should be played and who is best equipped to play it well. The managerial, scouting, and instructional leadership within each Major League franchise also subscribe to organizational philosophies regarding the factors that influence on-field success, and one accepted belief across all Major League Baseball organizations is the importance of the First Year Player Draft (Sabino, 2009).

Initiated in 1965, the First Year Player Draft provides all 30 Major League franchises with the opportunity to choose new players over 50 selection rounds that occur in reverse order of the previous season's winning percentages. To prepare for this annual event, each Major League franchise employs a cadre of area scouts (i.e. to identify baseball talent and potential within a specific geographical footprint); cross-checkers (i.e. scouts who evaluate area scouts' top ranked prospects and make comparisons across geographical regions); a scouting director (i.e. to lead and coordinate the organization's scouting operations); and, a general manager, who, in collaboration with the scouting department, determines the franchise's draft selections and new player salary budgets.

Professional scouts' ability to identify baseball talent and potential directly impacts the organization's long-term success at the Major League level. Specifically, the First Year Player Draft features these critical realities: (a) 90% of all draft selections who progress to the Major Leagues do so after five years or less of additional talent development in the minor leagues (O'Kennedy, 2013); (b) following lengthy minor league development apprenticeships, in the first ten rounds of the annual draft MLB organizations average only one player advancing to the Major Leagues (Burger & Walters, 2009); (c) the performance productivity of most draft picks fail to generate a positive rate of return on salary investment (Burger & Walters, 2009); and, (d) approximately one of six draft selections will play in at least one Major League game (Carfagna, Farrell, & Hazen, 2006; Eddy, 2013), while only one of 20 will complete at least three Major League seasons (Eddy, 2013). Specifically, an organization's yield of Major League talent is influenced by scouts' ability to identify prospects who have the potential to develop and become productive Major League players.

A growing body of research focuses on talent identification as a critical building block within the process of talent development (Armstrong, 2012; Gee, Marshall, & King, 2010; Wiseman, Bracken, Horton, & Weir, 2014). However, talent identification in sport resists a narrow or simple definition. The concept of talent identification is complex (Durand-Bush & Salmela, 2001; Tranckle & Cushion, 2006), elusive (Koz, Fraser-Thomas, & Baker, 2012), static and unclear (Abbott & Collins, 2004), and lacks a shared terminology (Christensen, 2009), a standardized working definition (Abbott & Collins, 2004; Durand-Bush & Salmela, 2001; Howe, Davidson, & Sloboda, 1998; Regnier, Salmela, & Russell, 1993; Tranckle & Cushion, 2006; Vaeyens, Lenoir, Williams & Philippaerts, 2008), and an affirmed theoretical framework

(Byoungoo, 2014; Durand-Bush & Salmela, 2001; Ericsson, Krampe, & Tesch-Romer, 1993; Wiseman et al., 2014).

What are the differences between potential and talent identification, and can experts accurately forecast potential when numerous definitions of talent exist? Although the construct of potential is closely related to talent identification, some sectors continue to hold potential at an arm's length in deference to time honored beliefs in innate ability (Dweck, 2008; Ericsson, 2007; Ericsson et al., 1993; Ericsson, Nandagopal, & Roring, 2009). One camp views talent as a collection of attributes capable of development and growth; whereas, another camp views talent as a "natural ability" with a fixed performance ceiling. Whether one's convictions rest with natural talent, talent development, or some combination of the two, the world of sport universally accepts the efficacy of talent as a component of expert performance (Dweck, 2008).

Psychological predictors for performance expertise are numerous and include motivation (Abbott & Collins, 2004; Gee et al., 2010), the motivation to pursue challenge (Ericsson et al., 1993; Ericsson et al., 2009; Smith & Christensen, 1995), the willingness to embrace hard work (Christensen, 2009; Ericsson et al., 1993; Johnson, Castillo, Sacks, Cavazos, Edwards, & Tenebaum, 2008), deliberate practice (Ericsson et al., 1993; Ericsson, 2007; Ericsson et al., 2009), "capacity to develop" (Abbott & Collins, 2004, p. 398), confidence (Gee et al., 2010; Smith & Christensen, 1995), and game intelligence (Christensen, 2009). Talent is a critical commodity, and the results of my study may shed light on the attributes professional scouts define and identify as they make decisions regarding the Major League potential of baseball prospects.

The competitive balance of Major League Baseball continues to rise (Horowitz, 1997), and in the business of competitive sport a performer is typically judged to be either an asset or a

liability. Major League Baseball is an \$8 billion industry (Gordon, 2014) comprised of 750 Major League and 6,000 minor league (*ThePostGame*, October 23, 2014) roster spots for individual players. The primary input for long-term success at the Major League level is the consistent infusion of talented players into an organization's developmental pipeline (Bradbury, 2007), and the object of effective scouting is to make good decisions (Rosenthal, 2002). Annual minor league operational costs can exceed \$25,000,000 (Carfagna et al., 2006), and after three years of Major League service a player is eligible for salary arbitration (Carfagna et al., 2006), after six years free agency (Caporale & Collier, 2013), and the average salary for a 2015 Major League player is nearly \$4.25 million (Petchesky, 2015).

Clearly the search for Major League talent includes high player development costs, low odds of advancement to the Major Leagues, and all within a narrow timeline for productive service prior to free agency eligibility. Scouts do not talk about misses or why draft selections, assumedly capable of advancing to the Major Leagues, did not make it. This study is important because it attempts to understand the player talents and attributes fundamental to the development of baseball expertise. The First Year Player Draft is a decision-making process that hinges on the values scouts and organizations place on physical talent, psychological attributes, and potential, and increasing an organization's yield of Major League players positions the franchise for long-term competitive and financial success.

Research Question

How do professional baseball scouts define player attributes and make decisions to identify or eliminate Major League prospects?

Definition of Terms

Actions. "Actions, refer, literally, to how a player's body works" (Winston, p. 56).

Area Scout. An area scout is assigned a defined geographical territory and charged with conducting comprehensive baseball prospect identification and projection within that area (Kerrane, 1999; Story, 2000; Winegardner, 1990). Tony Lucadello, the area scout who signed the most Major League players in recorded history, stated that being an area scout "only amounts to this: I found them. That's what I'm paid to do" (as cited in Winegarder, 1990, p. 28).

Bad Makeup. A general catchphrase used by professional baseball scouts that refers to a range of prospect problems (e.g. crime, conduct, character, core values, confidence, et al.). Lewis (2004) defined bad makeup as meaning, "'the kid's got problems we can't afford to solve" (p. 25).

Bird Dog Scout. A part-time or commission scout mentored by and answering to an area scout to provide prospect identification "coverage" for large cities and/or regions within an area scout's territory. Bird dog scouts expand a scout's evaluation network and provide vital reconnaissance in the coverage of large areas (Winegardner, 1990). "'The longer you scout, the more contacts you have, the smarter you get'" (Jocko Collins, veteran MLB and NBA scout, as cited in Kerrane, 1999, p. 280).

Cross-Checker. A cross-checker scout is charged with evaluating an area scout's top-rated prospects and comparing these prospects to top-rated prospects across other areas, nationwide, and within an organization's minor league farm system (Kerrane, 1999).

Face. The concept of seeing within the mind and heart of a baseball player. "...I never used to sign a boy unless I could look in his face and see what I wanted to see: drive, determination, maturity, whatever." (Kerrane, p. 124)

Farm System. Major League Baseball's (MLB) talent development system of independently-contracted community-based teams that are comprised of players and coaching staffs salaried by a MLB franchise. A franchise's minor league affiliates compete at the Rookie, A, AA, and AAA levels, and these stepwise classifications reflect increasing levels of player performance expertise. The Player Development Contract (PDC) "...specifies the terms of all affiliations between major league teams and their minor league farm clubs...." (Weiler & Roberts, p. 147). Branch Rickey is acknowledged for advancing the farm system as a cost-containment measure (Monteleone, 1995, p. 62), and the 2015 average salary for single-A players averaged approximately \$6,250 (*ThePostGame*, 2014).

Five Tools (Position Player). Hitting for average; hitting for power; fielding; running speed; and throwing (Kerrane, 1999; Manuel, 2015; Rymer, 2013; Shanks, 2005; Story, 2000).

Five Tools (Pitcher). Delivery and mechanics; fastball velocity and movement; breaking ball; change-up; and control (Kerrane, 1999; Manuel, 2015; Rymer, 2013; Shanks, 2005; Story, 2000).

Future Grade. Major League franchises require scouts to forecast a future numerical grade for the five tools evaluated in position players and the five tools evaluated in pitchers. Adding the sum of the future grades for all five tools and dividing by five equals the Overall Future Potential (OFP) (Manuel, 2015; Story, p. 57). A baseball prospect's OFP is regarded as being the most important factor in composing organizational draft lists (Story, p. 51).

Frame of Reference (Comparison). The practice of comparing an amateur prospect's tools to the tools of past or present day Major League players. Story (2000) stated, "Drawing comparisons between current and past ballplayers with similar abilities, body type and mental makeup offers invaluable insight" (p. 28).

Instincts. A baseball player's ability to "read" (i.e. see and understand) swings, pitches, game situations, hops, baseball trajectories, and a variety of other baseball movements and game strategies. To study baseball is to analyze instinct within a game of failure. "Baseball instincts are the result of practice and game experience...." (Story, 2000, p. 156).

Major League Scouting Bureau (MLSB). Serving 17 subscribing MLB franchises in its first year (1974) and designed to pool scouting resources as a cost-containment measure, the MLSB established a system of centralized scouting reports with uniform numerical scales for prospects' present and future grades (Kerrane, 1999; Rickey, 1965; Rymer, 2013).

Movement. Describes the trajectory of a pitcher's fastball (and variations thereof): i.e. straight (no movement); run (movement to arm side); sink (downward movement to arm side); cut (movement away from arm side).

Numerical Grading Scale. Numerical grading scales as a talent identification system emerged across MLB franchises in the 1970s with the introduction of the Major League Scouting Bureau (MLSB) (Rymer, 2013). Although subjective individual differences and slight modifications within MLB franchises exist, present and future grades for prospect tools are ascribed using a 20 to 80 scale based on one's frame of reference regarding MLB average performance: e.g. 20 (poor); 30 (well below average); 40 (below average); 50 (average); 60 (above average); 70 (well above average); 80 (outstanding; Rymer, 2013; Story, 2000).

Player History. The act of seeing a prospect perform in the field over a longitudinal period of time while building a sight-based evaluation history of the prospect's tools and psychological make-up. Scouts analyze prospects, and each prospect reflects a playing history built from scenes of purposeful watching, skill evaluation, and comparison – all for the purpose of forecasting future performance and making decisions.

Position Player. Refers to a non-pitcher in baseball nomenclature, specifically players in the positions of first baseman, second baseman, third baseman, shortstop, left fielder, center fielder, right fielder, or catcher.

Present Grade. Major League franchises require scouts to forecast a present numerical grade for the five tools evaluated in position players and pitchers. Adding the sum of the present grades for all five tools and dividing by five equals the prospect's overall present grade (Story, 2000).

Prospect v. Suspect. For the scout focused on physical attributes, this dilemma refers to the act of inferring that a good athlete and/or athletic body is or will become a good, instinctive baseball player (Story, 2000, p. 154). Conversely, for the scout focused on refined baseball tools and instincts, this pertains to the assumption that a fundamentally sound player will continue to develop the necessary speed and quickness of a Major League performer (Story, 2000, pp. 155-6).

Safe Pic.: The concept of drafting players with good "signability" assessments and median-talent projections (Story, 2000). "'Safe' players might play in the big leagues but they won't make your team significantly better" (Story, 2000, p. 124).

Showcase Player. Today's American baseball industry features a commercial market laden with prospect evaluation (i.e. showcase) camps specifically designed for high school age players. The

"showcase player" is a label ascribed to those players who frequent prospect camps, and as a result become defined by scouts as "...not competing and playing the game; they're competing to show their skill level" (Henninger, 2013, p. 60). Carfagna et al. (2006) stated, "Because a showcase provides such a brief glimpse, an observer cannot measure the team concept." (p. 707).

Signability. Defined as the odds and/or conditions under which a scout projects that a draft pick will sign a contract (Story, 2000). Specifically, "Scouts must find out if a player, once drafted, will sign, and for how much" (Winegardner, 1990, p. 27).

Tendency. Baseball players demonstrate an inclination to perform in predictable ways, and scouts attempt to interpret these tendencies (e.g. a "running" fastball; a consistent pitching delivery; getting good "jumps" when fielding fly balls and/or ground balls). Will (1990) stated the concept of tendency is "The most important and reoccurring word in the language of thoughtful baseball people...." (p. 7). Lewis (2004) described three core tendencies of professional baseball scouts: (1) the tendency to generalize evaluations by making comparisons to one's personal playing experiences; (2) the tendency to allow a prospect's most recent performance to influence decision-making; and, (3) the tendency to over-focus on sight-based evaluations.

Tryout Camps. Endorsed and embraced by Branch Rickey (Monteleone, 1995), Major League organizations traditionally conduct tryout camps as a method to assist with mass coverage of a geographical territory and to identify prospects early in their playing careers (Story, 2000). Rickey prescribed that tryout camps should include individual evaluations of players' running speed, arm strength, hitting power, and pitching command (Monteleone, 1995).

Uniform Scout's Contract, Clause 3(b). "The employee pledges to maintain the confidentiality of all scouting information which he acquires hereunder, and to preserve such information for the exclusive benefit of the Club" (Kerrane, 1999, p. 9).

CHAPTER TWO: REVIEW OF THE LITERATURE

I conducted a review of literature to summarize the available studies investigating professional baseball scouts, their views of and methods for talent identification (TI), and for forecasting future performance. In conducting my review, I employed the following search terms: *Professional baseball scouts, talent scouts, talent identification, baseball expertise, baseball talent, professional baseball player attributes, Major League Baseball Draft,* and *professional baseball scout decision-making.* I accessed the following data bases (Academic Search Premier, Oasis, Pub Med, Pro Quest, Psych Info, and Sport Discus), and I reviewed 53 peer-reviewed studies and reviews, 20 books, 4 unpublished dissertations, and 59 articles.

Because I found few studies directly related to professional baseball scouts, I expanded my research to include talent identification, talent development, and expert performance in other domains, other sports (e.g. basketball, gymnastics, hockey, soccer, swimming, tennis), and within other countries (e.g. Australia, Canada, Dominican Republic, England, Germany, Korea). I organized my review findings into the following categories: (a) evolution and history of professional baseball scouts; (b) baseball talents, tools, and attributes; and (c) tastes for talent in sport.

Evolution and History of Professional Baseball Scouts

Professional baseball scouting evolved over the past 125 years through a series of stages influenced by the game's changing economies and player acquisition methods (Kerrane, 1999; Weiler & Roberts, 1998). Kerrane (1999) described the initial period as "The Bird Dog Era (? – 1919)," a time when playing careers began by signing with an independent minor league team, and advancement to higher levels of competition hinged on good performance and word of

mouth. Full-time scouts did not exist during this period, and Major League owners assembled their talent by purchasing the contracts of independent minor league players. Reluctant to assign purchasing rights to scouts in the field, Major League owners relied on a network of friends and former players to serve as commission scouts (bird dogs) and to point them in the direction of potential prospects. Branch Rickey, former University of Michigan head baseball coach (1910-1913), served as an early 20th century bird dog scout for the St. Louis Browns (Kerrane, 1999).

Following World War I, then St. Louis Cardinals General Manager, Branch Rickey, created a Major League franchise-owned "farm system" of minor league teams to save money (Monteleone, 1995). Other Major League owners eventually followed Rickey's lead, and this transformation effectively eliminated the talent pool and profit margins for independent minor league teams. Independent minor league teams developed players and sold them for profit. Whereas, a well-run farm system economically positioned Major League organizations to scout, sign, develop, and stockpile players under reserve for the purposes of "calling up" players to the Major Leagues, selling players to other organizations for profit, and/or making trades for new players (Kerrane, 1999). Professional baseball requires a profit margin to sustain the business of organized competition, and the farm system proved to be both a cost-saving and a revenue generating venture (Kerrane, 1999; Rickey, 1965).

The development of franchised farm systems combined with Rickey's "principle of quality out of quantity" (as cited in Kerrane, 1999, p. 24) also triggered the development of open tryout camps (Monteleone, 1995), a movement toward signing large numbers of players, the expansion of scouting departments, and a new commitment to fundamental teaching and player development (Kerrane, 1999). The framework for this business plan pivoted on each organization's ability to identify talent, to develop talent, and to advance their prospects up a

ladder of increasingly competitive levels of minor league competition leading to promotion to the Major Leagues (Story, 2000). Kerrane (1999) labeled this period as "The Rickey Era (1919-1946)" (p. 22), describing it as a time when organizations increasingly expanded their ownership interests in minor league affiliates and hoarded players. This evolution in the business of baseball created a survival of the fittest culture among professional players (Kerrane, 1999), because, once under contract, each Major League organization commanded full control of player compensation and career mobility through the reserve clause (Weiler & Roberts, 1998).

Major League Baseball's anti-trust exemption (Federal Baseball Club v. National League, 1922), the only labor mobility exemption in American professional team sport, excluded players from the protective canopy of free enterprise and operated advantageously for owners (Staudohar, Lowenthal & Lima, 2006). Introduced in 1887 to safeguard competitive equity and ownership assets, the reserve system empowered organizations to claim exclusive rights to a specific number of players, and, once signed by an organization, player mobility occurred in one of two ways: (a) the sale or trade of a player to another Major League organization; or, (b) the release of a player from employment (Weiler & Roberts, 1998). Four foundational pillars framed this system: (a) the institution of a uniform contract for all Major League players; (b) the authority for each franchise to unilaterally renew a player's contract at the end of a term and assign a player's salary for the subsequent term; (c) player confinement to the franchise holding their contract; and, (d) specifically outlined conditions regarding player assignment (Weiler & Roberts, 1998). As a result of MLB's antitrust exemption, contracted players lacked the freedom to negotiate employment with other Major League organizations (Staudohar et al., 2006; Weiler & Roberts, 1998).

Keri (2006) referred to the periods immediately following World War II as the "Golden Age (1949-1957)" and the "Expansion Era (1958-1969)." Sparked by the escalation of post-World War II revenues, the "re-establishment of baseball," and the restrictions of the reserve clause, the number of minor league teams continued to increase while the total number of full-time Major League scouts surged and professional baseball experienced what Kerrane (1999) described as the "Bonus Era (1946-1965)."

Implemented in 1947 as a measure to curb wealthy Major League franchises from consistently outbidding their competitors and stockpiling players, the Bonus Rule stipulated that any player signed to a contract over \$4,000 had to remain on that organization's 25-man Major League roster for a minimum tenure of two years (Brent, 1996). The Bonus Rule continued until 1950, only to be revised and re-implemented in 1952 by a committee chaired by Branch Rickey. Major League owners retroactively reversed the Bonus Rule in 1957 as the result of a 1958 vote, and reintroduced the Bonus Rule once again in 1962 with an amended 25-man roster service requirement of one year (Treder, 2004).

During this period Major League franchises expanded westward and increased in number from 16 to 24 (Keri, 2006), the integration of African American players occurred and increased the available talent pool (Monteleone, 1995), and professional scouts were now charged with cultivating relationships and developing prospect pipelines as "salesmen" in defined geographic territories (Kerrane, 1999). Bidding wars also intensified and signing bonuses progressively increased, prompting several organizations to expand their scouting coverage to economically underprivileged areas and regions such as the Negro Leagues, the Caribbean, and Latin baseball-playing nations (Kerrane, 1999).

Professional scouts during this period focused primarily on finding and signing baseball prospects with physical "tools" (i.e. baseball talents). Scouting reports graded physical talents with brief word descriptions. The nonphysical attributes "had only their attitudes, habits and hustle put under the microscope" (Rymer, 2013, p. 4), and these scouting reports summarized professional potential with a one word response to a short question: "Is player a prospect? (Rymer, 2013, p. 5). However, the escalation of bidding wars and signing bonuses eventually ushered in "The Draft Era (1965-Present)" (Kerrane, 1999), removing the Bonus Rule (Treder, 2004), and resulting in revised scouting methods and reports (Rymer, 2013).

The introduction of the First Year Player Draft in 1965 (also known as the Rule 4 draft) provided Major League organizations with the opportunity to select new high school, junior college, and 4-year college players in reverse order of the previous season's winning percentages (Weiler & Roberts, 1998). Outspoken and a man of paradox (Monteleone, 1995), Branch Rickey campaigned for a Major League amateur draft that "equalized talent" and eliminated "bonus bidding" (Rickey, 1965; Staudohar et al., 2006). In Rickey's view (1965), signing bonuses disrupted the competitive balance and threatened the strength and the future of the Major League product. In Kerrane's (1999) interpretation, "the owners wanted a structure to discourage their own spending in a market that was too open" (p. 184). Ironically, four wealthy Major League franchises lobbied against the creation of the draft at the 1964 Major League Winter Meetings, with only one eventually voting against – the St. Louis Cardinals, formerly led by Branch Rickey (Durso, 1964). As a result, the draft initially reduced signing bonuses by eliminating bargaining leverage and bidding wars among Major League organizations (Kerrane, 1999), and the rights for ownership of newly drafted players occurred in one of two ways: (1) Contractually signed; or, (2) unsigned and under reserve (Weiler & Roberts, 1998).

The First Year Player Draft originally included three annual drafts: (1) January, for December high school and junior college graduates; (2) June, for high school, junior college, and 4-year college players; and, (3) August, for those players undrafted in January and June and completing their amateur summer seasons (Koppett, 1965). The August draft ceased after 1967 and the January draft in 1987 (*MLB Draft History*) Despite the first selection of the inaugural June First Year Player Draft being from a 4-year college (Rick Monday, Arizona State University), the five June drafts from 1967 to 1971 only included seven collegiate draft picks. However, this trend reversed over the subsequent six drafts, and in 1978 the majority of June draft selections originated from the collegiate ranks and continues today (Spurr, 2000; Staudohar et al., 2006). Today, the following conditions determine an amateur player's eligibility for the MLB First Year Player Draft: (a) must be a resident of the U.S. or a U.S. territory; (b) never before signed to a major or minor league contract; (c) a high school graduate who never attended college; (d) a 4-year college student in his junior year or 21 years of age; (e) a junior college student (*MLB First-Year Player Draft*).

The onset of the First Year Player Draft also triggered increased sophistication and rigor in scouting reports (Rymer, 2013), and, in Kerrane's (1999) view, the draft created a "greater psychological distance" between scouts and prospects because "a scout's job now would be to give advice without making decisions" (p. 36). Prior to the draft, Major League organizations operated with simple, qualitative scouting reports, and scouts enjoyed great independence. Predraft scouting resembled window shopping on pay day: If a scout saw a high performing amateur player, with front office approval, he simply filled in the contractual blanks and signed the young prospect (Rymer, 2013; Winegardner, 1990). However, as the Draft Era unfolded, franchises began to require quantitative measurements of physical "tools" and expanded

reporting expectations for intangible attributes (Rymer, 2013). At the same time "competition among scouts" dissipated across Major League organizations because the draft eliminated the open market and heightened selectivity (Kerrane, 1999, p. 36). In effect, scouts became recommending buyers who did not begin the process of selling a prospect on the merits of their franchise and its' player development system until *after* the draft (Kerrane, 1999). Staudohar et al. (2006) described the draft as anticompetitive and restrictive, and Kerrane (1999) quoted former Philadelphia Phillies Scouting Director, Paul Owens, who criticized the First Year Player Draft, "'the draft rewards mediocrity. It stifles initiative in scouting'" (p. 184).

Prior to his death in December 1965, Branch Rickey campaigned for what he termed "pooled scouting," making the case for transparent, dependable, exhaustive, and standardized scouting reports across all Major League organizations to foster equal opportunity and yield owners savings in excess of 90 percent (Rickey, 1965). Rickey (1965) believed that "close competition is the lifeblood of any sport," and he identified "equalizing the teams" as professional baseball's key complication during that time period (p. 199). Rickey (1965) presented "pooled scouting" as a formula for reducing and/or eliminating geographic scouts across all Major League franchises in exchange for "nonpartisan institutionalized scouts" (p. 200) commissioned to identify prospects and supply comprehensive scouting reports to *all* MLB organizations. Characterizing pre-draft scouts as salesmen who operated independently, Rickey's (1965) proposal for "pooled scouting" integrated the "expert information of no less than three high-class scouts on practically every prospective player" (p. 200).

Kerrane (1999) characterized pre-draft scouting as oral, mental, and filled with personal freedom; on the other hand, he described post-draft scouting as bureaucratic and laden with over-the-shoulder cross-checking. Pre-draft scouts worked independently, identifying prospects to

make a "hire;" whereas, the Draft Era regulated an organization's number of "hires" (i.e. draft selections) and the timeline in which they are made (Kerrane, 1999). As a result, the draft intensified the organizational importance for comparing one prospect against others nationwide, giving birth to the role of cross-checkers (Kerrane, 1999). Cross-checkers scout area scouts. Specifically, cross-checkers evaluate the prospects area scouts identify to provide scouting directors and general managers with "centralized comparative judgment prior to each draft" (Kerrane, 1999, p. 170). Kerrane (1999) defined cross-checking as "an exercise in continuous comparative judgment" (p. 172), and, quoting the Philadelphia Phillies' *Scouting Manual*, he summarized the draft's net effect as a newfound awareness that "scouting is no longer an individual accomplishment" (p. 170).

In 1974 Rickey's concept of "pooled scouting" came to realization in the form of the Major League Scouting Bureau (MLSB), as 17 franchises funded the launch of the MLSB with individual annual payments of \$120,000. The introduction of the MLSB also resulted in the termination of nearly 250 full-time scouts as a cost-containment initiative, and it marked a turning point in the self-perceptions of professional baseball scouts and the talent identification business plans of Major League franchises (Kerrane, 1999). Kerrane (1999) claimed the homogeneity and anonymity associated with the MLSB clouded the self-images of veteran professional baseball scouts, and it served as a line of demarcation separating Major League franchises' scouting philosophies across a continuum: spanning from the economy-minded organizations with few to no scouts, and extending to organizations not subscribing to the MLSB and continuing to operate with robust scouting departments.

The First Year Player Draft and the MLSB introduced two transformative changes in professional baseball scouting: (a) the projection of "signability" (Story, 2000); and, (b) a

uniform scouting report (Rymer, 2013). Signability for a professional scout is defined as the odds, terms, and conditions under which a scout projects that a draft pick will sign a contract (Story, 2000). Although the conceptual design of the First Year Player Draft ensures parity in player selection, it does not balance every organization's ability to supply competitive signing bonuses, and this budgetary reality influences and reconfigures draft order selection. For example, highly rated prospects with low signability are bypassed (or chosen in later rounds), and lesser rated prospects with high signability (i.e. safe picks) are drafted earlier (Story, 2000).

Rymer's (2013) document analysis of scouting reports during this period described signability as a prospect's "probability of signing" (p. 9) across a three-point Likert scale that also included "spaces for recommended signing bonus and expected signing bonus" (p. 9). Not wanting to waste valuable draft selections, organizations hold scouts accountable for projecting toughness and signability before the draft (Kerrane, 1999; Story, 2000). In addition, the creation of the MLSB across 17 MLB subscribers paved the way for uniformity in scouting reports, standardizing a 20-80 numerical scale for five tools across both pitchers and position players (Rymer, 2013). Perhaps more importantly, these reports required quantitative grades for *both* present and future abilities. However, Kerrane's (1999) investigative analysis questioned the value of the MLSB, stating it "symbolized anonymity, uniformity, and caution" (p. 280). In 1983 MLSB membership became a requirement for all Major League franchises, and, for some organizations, MLSB scouting reports only served as a "nationwide bird-dog service" (Kerrane, 1999, p. 335).

Keri (2006) labeled the period (1970-1976) following the introduction of the First Year Player Draft as the "Dynasty Era." This timeline featured the championship dominance of the Reds, Athletics, and Orioles, winners of nine league pennants and six World Series, prior to the

beginning of free agency in 1977. In the midst of the Dynasty Era, Los Angeles Dodgers and Montreal Expos pitchers, Andy Messersmith and Dave McNally in 1974 declined to sign contract renewals with their teams, choosing instead to play the 1975 season under the Option Clause (Weiler & Roberts, 1998). Specifically, Paragraph 10(c) of the Uniform Player Contract provided MLB organizations with the "right to renew the old contract 'on the same terms'" (exception: minimum salary must equal 75% of the previous year; Weiler & Roberts, p. 241).

This grievance (*National & American League Professional Baseball Clubs v. Major League Baseball Players Association*) exposed differing views between owners and players regarding the Option and Reserve Clauses, and the issue proceeded to labor arbitration in an effort to answer the following question: When a MLB franchise renews a player contract under Paragraph 10(c), is the option clause perpetual or does it expire after one year thereby allowing MLB players to become free agents who are then permitted to negotiate employment with any MLB franchise (Weiler & Roberts, 1998)? In the end, Arbitrator Seitz upheld the grievance, paving the way for free agency via the Option Clause. In 1976, following a labor stoppage, MLB owners and the Major League Baseball Players' Association (MLBPA) reached a new collective bargaining agreement (CBA) that allowed salary arbitration in years three through six of Major League service and free agency thereafter (Weiler & Roberts, 1998).

Player identification (i.e. scouting) and development (i.e. farm system) methods and expenses in Major League Baseball are different than and far exceed those of the National Football League (NFL) and the National Basketball Association (NBA) (*Baseball Examiner*; Kerrane, 1999). For example, nearly 100% of all NFL and NBA first round draft picks play in their respective leagues, whereas less than two of three MLB first round selections compete in the Major Leagues (Spurr, 2000). The introduction of the MLB First Year Player Draft also

introduced a philosophical shift in professional baseball scouting. Specifically, scouting moved from Rickey's survival of the fittest, "quality out of quantity" (Kerrane, 1999, p. 24) approach to player procurement in an open market, to a "quality only" (Kerrane, 1999, p. 143) disposition in a landscape where the cumulative salaries of franchises' 25-man Major League rosters now exceeded the combined costs of its farm system, draft bonuses, and scouting departments (Kerrane, 1999). In the past, "Rickey's tryout camps encouraged the signing of marginal players who might develop slowly" (Kerrane, 1999, p. 232), but the evolution of the draft, the creation of the MLSB, and the onset of free agency made it too expensive to run farm systems in the old Rickey-way, thereby setting the stage for the modern era of professional baseball scouting (Kerrane, 1999).

Rymer (2013) described the modern era (1990s to Today) of professional baseball scouting as "Got Everything Covered" (p. 11). Rymer's (2013) document analysis of this period's scouting reports illustrated: (a) the extensive quantification of a prospect's five tools and psychological make-up on a 20-80 scale; (b) a qualitative description of the prospect from the scout's perspective; (c) a biographical sketch of the prospect's background information; (d) projections of the prospect's future Major League production; and, for some organizations' reports, (e) opportunities to share "Scout's intuition" (p. 12). Gone were simple qualitative scouting reports with one word responses, and Kerrane (1999) described today's professional baseball scouting as a time when "pro experience isn't necessary anymore. What's more important is being analytical, organized, mobile, able to do a lot of reporting" (p. 255). In a phrase, complexity and measurement replaced simplicity and intuition in the high stakes business of professional baseball talent identification.

Baseball Talents, Tools, and Attributes

"The Book" represents baseball's anecdotal guide for how the game should be played and who is best equipped to play it well, and as one who played and coached college baseball for 31 years, my experiences and scouting relationships exposed me to different precepts of The Book. However, *Branch Rickey's Little Blue Book* (Monteleone, 1995), a collection of his personal papers, outlined the most prevalent scouting maxims during the early decades of professional baseball.

Rickey spent 42 years (1913-1955) as a Major League manager and general manager (Monteleone, 1995), and "Rickey men were trained in scouting by the master himself, and they still subscribe to his theories of pitching, hitting, and the primacy of speed" (Kerrane, 1999, p. 95). Rickey stated "there are only three fundamental things that scouts should take a look at when they're judging players, the arm, the legs, the power" (Monteleone, 1995, p. 60), and he often referred to a fourth attribute for prospective Major League players: A player's love for playing the game (Rickey, 1965). Compared to Major League players, Rickey (1965) maintained that the minor leagues are laden with a greater wealth of power hitting, running and throwing speed, and he hypothesized "aptitudes, attitudes, and effort, all capped by desire, may count as much as differences in physical abilities" (p. 85).

The Arm

Baseball (and softball) is unique among American team sports because the defense maintains control of the ball. A pitcher's arm delivers the ball to opposing hitters, and, as a result, this distinction elevates the primacy of good pitching for overall baseball team success.

Compared to assessing defensive players and hitters, Carfagna et al. (2006) described pitchers as

the easiest prospects to evaluate in one performance, and Rickey (1965) classified pitching prospects in three categories: (a) pitchers with "stuff;" (b) pitchers with expert control and change of speed; and, (c) a combination of one and two. Rickey (1965) defined "stuff" as velocity that overpowers hitters and as a result does not require pinpoint command (i.e. control). On the other hand, Rickey identified control as the chief standard for pitching greatness, and he theorized that a lack of pinpoint command signified an absence of mental concentration (Monteleone, 1995).

Rickey's (Monteleone, 1995; Rickey, 1965) most-quoted pitching maxims focused on pitchers' "feel" and "instinct" for deception and their competitive make-up. Rickey defined the three elements of every pitch as velocity, direction, and speed of spin, and he loved to teach the change-up, a pitch of deception (Monteleone, 1995). Thrown with the same body and arm speed as a pitcher's fastball, the change-up, thrown correctly, travels 10-12 miles per hour slower than a pitcher's average fastball (Story, 2000). As a result, an effective change-up disrupts a hitter's timing, balance, and power because the hitter swings at what he "thinks" he sees (Monteleone, 1995; Story, 2000). Rickey preached the ethics of pitching deception and stated "we fool him – that's the whole purpose of the game" (Monteleone, 1995, p. 25).

From a scouting perspective, Rickey admitted that change of speed pitchers (i.e. "tricky ones") are the easiest to dismiss from consideration as Major League prospects (Monteleone, 1995). However, he also asserted that pitchers have an unlimited capacity to adjust speeds and add new pitches to their repertoires, allowing them to develop their talent and become more successful – "and you then must admit you made a mistake in your previous judgment" (Monteleone, 1995, p. 26). Rickey also claimed pitchers will not increase their fastball velocity over the span of their adult careers; rather, pitchers' successful improvement hinges on their

capacity to develop pitch movement and change of speed with control (Monteleone, 1995). On the other hand, Tony Lucadello, regarded as the most successful area scout of all time, theorized only pitchers with correct mechanics can increase their velocity over time (as cited in Kerrane, 1999).

When identifying and making final decisions about pitching prospects, Rickey focused on "control," believing the ability to consistently hit the catcher's target and change speeds are byproducts of a pitcher's psychological make-up (Monteleone, 1995). Specifically, Rickey had no tolerance for anger in pitchers, declaring its appearance eroded one's ability to perform with pinpoint command (Monteleone, 1995), and he defined control as "'throwing a strike when you have to'" (p. 29). Rickey did not accept wildness in pitchers (i.e. an inability to consistently throw strikes), and he hypothesized wildness springs from poor concentration and a lack of personal commitment to constructive feedback and focused improvement (Monteleone, 1995). Rickey also theorized a pitcher's inability to deliver the right pitch at the right time is the result of a "fear complex" and symptomatic of a pitcher's lack of experience and/or self-confidence (Monteleone, 1995). Stated differently, Shanks (2005) defined a pitcher's most valuable advantage as the absence of fear when making pitches to hitters.

Rickey defined "character of the delivery" (Monteleone, 1995, p. 35) as the most vital fundamental for pitching success, and Story (2000) compartmentalized this concept in two parts: (1) mechanics; and, (2) delivery. For Story (2000) mechanics represented the learned fundamentals of the pitching motion; whereas, a pitcher's release point and arm swing comprised his hereditarily determined delivery. As a scout, Story (2000) identified "durability" as the most vital attribute for identifying talent in pitching prospects, and he described durability as comprised of consistent velocity, pitch command, delivery, and mechanics. Consistent with

Rickey's viewpoint, Story (2000) emphasized the superiority of pitch command for overall pitching effectiveness, and he specifically underscored its critical importance for pitchers of average Major League velocity.

Today's baseball scouts have the advantage of the radar gun to measure pitch velocity in real time, and Story (2000) characterized this tool as a great "equalizer." Specifically, veteran professional baseball scouts possess extensive prospect memory banks, and as a result they demonstrate a stronger tendency to evaluate a pitcher's ability to get hitters to make outs with less reliance on radar gun results (Story, 2000). On the other hand, Story (2000) described younger, less experienced professional baseball scouts as more inclined to over-focus on quantifying pitchers' velocity because their prospect "memories" are less developed.

The Legs

The radar gun and stopwatch represent the only objective measurement tools for physical talents in the professional baseball scout's arsenal, thereby minimizing the prevalence of subjectivity in the cases of exceptionally fast pitchers and fast runners (Story, 2000). Believing that hitting alone cannot win, Branch Rickey took personal credit for the presence of running speed on all of his teams, and he campaigned for the preservation of the stolen base as a vital baseball strategy (Monteleone, 1995).

Not unlike the change-up, Story (2000) maintained good running speed in an individual player offsets deficiencies in other offensive and defensive tools while also compensating for weaknesses in teammates' running speed. Grove (2001) hypothesized objective talent identification measures can successfully predict baseball potential, and he experimentally applied tests of sprint speed, arm strength, and power over multiple trials and compared performance

results across groups of junior college, NCAA Division I, and minor leagues baseball players. However, sprint speed results failed to distinguish players between competitive classifications. To this end, although good running speed is important for baseball position players because it represents the only physical tool that transfers both to offense and to defense (Monteleone, 1995; Story, 2000), Story (2000) maintained "speed without baseball instinct doesn't do much good" (p. 61).

Rickey claimed getting a good jump in a stolen base attempt is one part genetic and another part learned instinct (Monteleone, 1995), and Story (2000) contended Major League organizations experience intense prospect identification pressures regarding running speed. Specifically, Major League Baseball continues to experience a scarcity of speed because fast runners in youth sport more often choose to play football or run track, and this reality presents franchises with draft day decision dilemmas related to selecting fast runners with poor baseball instincts (Story, 2000). As a result, Story (2000) claimed, because speed is both rare and vital, Major League franchises are more inclined to exhibit greater patience and extend more minor league development time to fast runners.

The Power

Branch Rickey (Monteleone, 1995) claimed the chief distinction between Major League hitters compared to minor league hitters is the maturity and advancement of strike zone knowledge. Specifically, Rickey maintained MLB hitters have a more refined understanding of balls and strikes, when to swing, and when not to swing. Making a similar comparison, Story (2000) asserted the greatest difference between major and minor league hitters is their "ability to adjust" (pp. 73-74) and, in the absence of an adaptive, competitive, and training mindset, all strengths of hitting form, power, and bat speed are nullified.

As the architect of tryout camps, Rickey (1965) required his scouts to focus closely on hitters in two areas: (1) form; and, (2) power. Rickey (1965) simplified prospect evaluations to include scouting grades for only these two categories, and he believed a hitter's courage flowed from good form and that a hitter's power is genetically instilled. Paradoxically, Rickey (1965) proclaimed a stalwart belief in batting practice and instruction, declaring "most players do improve on batting as time goes on" (p. 111). Story (2000) defined "raw power" as the distance a player can hit a baseball, and when evaluating power Rickey (1965) held to the conviction that "power is inborn, and its control and explosive use is instinctive" (p. 111). Although Rickey (1965) submitted that increasing the consistency of a hitter's power output is subject to training, he also declared "you either have power or you don't have it. It is not acquirable" (p. 111).

As a scout, Story (2000) insisted hitting a baseball is among the most difficult of all sport skills to master, and he argued projecting a hitter's ability to become an expert is perhaps the most complicated talent to identify. Story (2000) identified "competitiveness, natural ability and hard work" (p. 73) as the critical ingredients for hitting expertise while underscoring the vital importance of self-confidence. Like Rickey, Story (2000) asserted a fundamental belief in deliberate, focused batting practice while also theorizing, specific to hitting, "excellent hand speed and aptitude are natural abilities" (p. 73). To this end, Story (2000) defined power as directly correlated with a hitter's ability to generate bat speed through contact with the baseball.

The Fourth Attribute: Love for playing the game

Rickey (1965) tentatively hypothesized aptitude, attitude, effort, and desire "may count as much" (p. 85) as physical abilities when identifying talent and developing baseball prospects who can advance to the Major Leagues. Comparatively, Winegardner's (1990) investigation of veteran scout Tony Lucadello described scouting as a combination of a baseball prospect's head,

heart, and baseball talent, and Lucadello disclosed the most problematic element of a scout's decision-making is "'projecting if a player's mind is ahead of his body or if his body is ahead of his mind, and guessing when they'll get together" (p. 62).

Lucadello classified professional baseball scouts in four categories: (a) poor; (b) pickers; (c) performance; and, (d) projectors (Winegardner, 1990). Lucadello also defined himself as a projector: that is, as a scout who identified prospects by projecting what type of players they will become in two to three years (Winegardner, 1990). Lucadello believed projection is a scout's most important responsibility but that only five percent of professional baseball scouts are "projectors," compared to the 85 percent he characterized as "performance based" scouts (Winegardner, 1990). More definitively, Lucadello viewed performance based scouts as those exclusively focused on the measurements and results of a prospect's physical abilities and performances; whereas, Lucadello described his prospect decision-making process as an equation: specifically, his decision regarding a prospect's projection equaled the net sum of the player's pluses and minuses (Winegardner, 1990). In contrast, Lucadello defined "pickers" as scouts who cannot foresee a prospect's development beyond the discovery of a performance weakness, even in the presence of identified pluses (Winegardner, 1990).

Story (2000) outlined the non-physical elements of prospect identification as "extras," and he stated "the many variables each player presents in the make-up department complicate the process of deciding" (p. 115). Similarly, in Shanks' (2005) investigation and analysis of the Atlanta Braves' rise to dominance, Roy Clark, Braves' scouting director from 2000-2009, insisted "the most difficult thing to define is 'what is makeup?'" (p. 58). Clark situationally described "makeup" as the summation of seeing a prospect's competitive confidence in crucial game situations, his responses to adversity, and his best and his worst performances over

multiple observations (Shanks, 2005). Lou Gorman, a veteran MLB general manager and scouting director for over 30 years, believed "makeup drives great ballplayers" (Shanks, 2005, p. 177), and he listed the ingredients comprised in makeup as toughness, drive, ambition, work habits, and baseball knowledge and ability. Sustained passion for the game and focused training, according to Lucadello, are found in "players who keep improving" (Winegardner, 1990, p. 86), and, for veteran professional baseball scout Al Kubiski, if player development and progression to the Major Leagues is to occur "'it's all about makeup" (Shanks, 2005, p. 211).

The Atlanta Braves won 15 of 16 National League Division Titles from 1991 to 2005, and Paul Snyder served as a key architect in their successful rise to dominance while performing in the roles of scouting director, assistant general manager, and director of player development (Shanks, 2005). Snyder's scouts and direct reports recalled his persistent talent identification question, "which players are going to seek their level?" (Shanks, 2005, p. 338). Snyder's answer to this question focused on the prospect, "how they handle adversity'," and seeing beyond what a player cannot do (p. 338). Snyder maintained "in order to seek your level you have to have good makeup'" (Shanks, 2005, p. 338), and he defined one's "level" as the full realization of personal potential. Similar to Lucadello, Snyder taught his scouts to see prospects "for everything they can do. The positives. It separates you from the industry when you look at that'" (Shanks, 2005, p. 338). Separation in Snyder's context described talent discovery beyond what is immediately evident to the naked eye (Shanks, 2005).

Mentored by Paul Snyder, former Braves' scout Paul Kohlscheen reflected on Snyder's descriptions of prospects' optimal makeup and realized these depictions closely compared to Snyder's personal makeup (Shanks, 2005). In other words, Snyder preferred a makeup approximating his own. On a deeper level, Michael Lewis (2004), in his account of Oakland A's

general manager Billy Beane's re-engineered approach to baseball talent identification, analyzed scouts' biases across three tendencies: (1) the tendency to grade and project prospects through the lens of one's personal experience; (2) the tendency to allow a prospect's most recent performance to influence a scout's decision-making; and, (3) the tendency to over-focus on sight-based prospect evaluations. Thaler and Sunstein's (2003) response to Lewis' work hypothesized the prevalence and influence of the "availability heuristic" in baseball scouts' decision-making paradigms. Specifically, heuristics function as a rule of thumb, and, availability, in this context, describes a "reliance on the ease of memory search" (Kahneman, 2011). In effect, while heuristics often serve a powerful and positive role in making quick predictions, an over-reliance on heuristics in the absence of statistical thought can also result in "predictable biases" (Kahneman, 2011). Thaler and Sunstein's (2003) analysis stated "reliable statistical evidence will outperform the availability heuristic every time" (p. 29), or, in the case of baseball scouts, intuition is less reliable than the statistical validation of talent identification when forecasting baseball potential.

Identifying amateur talent and predicting potential are both difficult and financially critical in professional sport. The NFL, NBA, MLB, and NHL all make player selections via a first-year player draft, and Koz et al. (2012) investigated the statistical correlation between draft order and player performance over the course of a decade. Koz and colleagues (2012) chose total games played as a measure of realized potential and identified a linear relationship with selection round across NFL, NBA, and NHL draft picks. In brief, early round football, basketball and hockey draft picks played in more games than later round draft picks. However, MLB draft selections deviated from this trend, yielding no statistically significant differences between draft round and playing time for pitchers and marginal effects for position players (Koz

et al., 2012). Koz and colleagues' (2012) results suggested the presence of ineffective talent identification and development systems within MLB, and Spurr's (2000) earlier longitudinal analysis found "no statistically significant difference between clubs in terms of their ability to find major league prospects" (p. 66).

MLB organizations generally average two players per First Year Player Draft (i.e. 50 rounds) advancing to major league careers, and this low percentage of productivity prompted Nyman (2008) to question MLB organizations effectiveness in talent identification and development. Nyman (2008) doubted MLB's acute knowledge of the player attributes that foster performance expertise, and he pointed to MLB's inability to diagnosis why a high percentage of assumedly talented minor league players never advance to major league careers. Nyman (2008) acknowledged an organization's confidence in prospect decision making is influenced by their scouts' depth of player history, and he stated "the actual bottom line for drafting and developing players is 'perception of talent'" (p. 10). Extending upon this logic, Nyman (2008) rhetorically asked, "How does one measure scouting expertise" (p. 18)?

After interviewing scouts across 15 MLB organizations, Kerrane (1999) surmised scouting intuition is "maybe simply the scanning of images in well-stocked memory banks" (p. 324). Veteran NBA and MLB scout Jocko Collins defined talent identification as "getting a feeling for a guy" (Kerrane, 1999, p. 295) and then comparing that "feeling" to your visual recollection of past scouting successes with the understanding you also will make mistakes. Veteran Baltimore Orioles' executive, Jim McLaughlin, underscored the importance of scouts' instinctive talent recognition. Describing the detection of baseball talent, McLaughlin stated a scout "can't make the recognition unless he already has some structures in his mind" (Kerrane, 1999, p. 165). Succinctly, Kerrane (1999) explained the essence of baseball scouting as "a

business of intuitions" (p. 135), and Burger and Walters (2009) stated "scouts often use analogies linking prospect's traits to those of established major leaguers" (p. 486).

Lewis (2004) described the Oakland A's 2001 draft as an "expensive disaster," and this result in combination with Oakland's low payroll and losing records moved general manager Billy Beane to radically redefine the organization's philosophical framework for prospect identification. Frustrated by scouts' traditional independence, decision-making autonomy, and shallow scientific methods for prospect identification and projection, Beane limited his scouts' draft selection power and considered removing all of the franchise's field scouts in order to eradicate "being victimized by what we see" (Lewis, 2004, p. 37). Faced with the challenge of leading a low-payroll organization during a period (1995-2001) when high-payroll teams won nearly 100 percent all MLB post-season games (Krautman, 2009), Beane recalibrated the concept of "performance scouting" through the use of statistical analysis (Lewis, 2004).

Beane set aside The Book's reverence for sight-based scouting customs and intuitions and searched for ways to identify and sign good players cheaply (Armstrong, 2012, Spring; Caporale & Collier, 2013; Lewis, 2004; Roberto, 2005). In his review of 20th Century MLB statistics, Beane's assistant, Paul DePodesta, identified the positive correlation between team winning percentage, on-base percentage (OBP), and slugging percentage (SLG) (Lewis, 2004). In brief, teams that frequently win score the most runs (Keri, 2006). OBP measures a hitter's frequency for getting on base "via hit, walk, or hit by pitch" (Keri, 2006, p. 5), or, said differently, OBP reflects a hitter's skill, makeup, and instinct for getting on base without making an out for his team. SLG "measures a player's power" (Keri, 2006, p. 5) by calculating the percentage of total bases a batter earns when hitting safely (i.e. an out is not recorded). For example, a double (two total bases) counts for twice the slugging percentage of a single (one

total base) divided by the same number of official at bats, and "more bases" ignite more run production.

Similar to the economic rationales leading to the implementation of the Bonus Rule, the First Year Player Draft, and the Major League Scouting Bureau, the large bonuses associated with signing new players pushed Beane to identify "the qualities in a baseball player that the market undervalues" (Lewis, 2004, p. 292). This search led to the discovery of the unfashionable and undervalued attributes associated with a "player's ability to get on base" (Lewis, 2004, p. 128). Unfashionable in baseball lore, yet business management experts applauded Beane for questioning MLB's traditional scouting perspectives and the game's misguided habits for measuring offensive productivity (Wolfe, Babiak, Cameron, Quinn, Smart, Terborg, & Wright, 2008).

For Beane, OBP signaled and substantiated the presence of makeup and baseball instinct. The writings of baseball statistician Bill James also influenced and challenged Beane's tradition-influenced interpretation of offensive baseball and the accuracy of scout projections (Lewis, 2004; Roberto, 2005). James denounced scouts' reliance on visual talent identification as well as MLB organizations' incomplete understanding of which statistics define and maximize offensive baseball success (Lewis, 2004; Roberto, 2005). For example, baseball purists customarily defined a walk as a pitcher's failure to command the strike zone instead of a hitter's ability to compete and force pitchers to throw more pitches within the strike zone. Questioning the rationality of offensive baseball statistics triggered new insights and a shift in Beane's talent identification paradigm, and he embraced James' conviction that scouts "absolutely cannot tell, by watching, the difference between a .300 hitter and a .275 hitter" (Lewis, 2004, p. 68).

The Oakland A's began to view baseball "as a game of skill, not an athletic event" (Lewis, 2004, p. 150), and Beane grounded his strategy for identifying hitters in OBP statistics. Specifically, high OBP is the result of the combined discipline and patience of fundamentally skilled hitters and thereby increases a team's opportunities for run production by placing more players on base and forcing opposing pitchers to throw more pitches (Hakes & Sauer, 2006). As a net effect, this statistical tool realigned the A's' talent identification methods and resulted in the selection of high-performing, affordable, and overlooked hitting prospects who consistently demonstrated high OBP. In turn, Hakes and Sauer (2006) applied econometric tests and confirmed Beane's theory of mispriced baseball tools and the undervaluation of OBP, while Staudohar and colleagues (2006) stated this application of statistical analysis in draft decision-making "diminished the importance of team scouts" (p. 39).

Beane maintained that "a young player is not what he looks like, or what he might become, but what he has done" (Lewis, 2004, p. 38), and he noted the most difficult aspects of statistical talent identification for professional scouts are the discomfort and peer scrutiny associated with drafting a player with an impressive OBP and a far lesser amount of raw athleticism, size, running or throwing speed. Candidly, Beane's analysis confirmed that all shapes and sizes of baseball players are capable of developing the physical skills and the mental attributes that result in consistently high OBP. Beane stated, "you take a guy high no one else likes and its uncomfortable" (as cited in Lewis, 2004, p. 3). Lewis (2004) judged this response to be a byproduct of professional baseball's tendency to align "itself less as a business and more as a social club" (p. 287), and he praised Beane for transforming prospects' lives by discovering "hidden virtues [that] otherwise might never have been seen" (p. 280).

For Oakland, the game pivoted around the strike zone and a belief that the greatest impediment to team run production occurs when a hitter strikes out. Hitters with high OBP strike out less frequently, command lower salaries (Lewis, 2004), and "OBP and SLG represent the two essential ingredients of creating offense" (Keri, 2006, p. xxxix). Paralleling Rickey's (1965) conviction regarding the efficacy of a hitter's strike zone knowledge, Oakland's executive leadership placed a high value on hitters' patience, pitch selection, ability to adapt, and absence of fear when hitting with two strikes (Lewis, 2004). For the A's, OBP revealed deeper clues about the "whole" player, and they pondered their origins: i.e. "were they learned skills, or part of a guy's character? Nature or nurture?" (Lewis, 2004, p. 172). Instead of answering these questions, Oakland questioned baseball's customary sight-based scouting practices, "the meaning of its statistics" (Lewis, 2004, p. 133), and professional scouts' tendency for biases and an over-focus on physical athleticism.

Tastes for Talent

Nature v. Nurture Debate

Talent is a valued commodity, and the perspectives regarding talent identification and performance expertise are divided across two polar belief systems commonly labeled "nature v. nurture." In this dichotomous debate, the first pole (i.e. nature) defines talent as a "natural ability" with a fixed ceiling of expertise, while the opposite pole (i.e. nurture) views talent as an inventory of attributes capable of continual development and improvement. In summary, the nature v. nurture debate considers whether the cause and effect product of expert performance is the result of natural talent, talent development, or a combination of both, and Simonton (1999) described the enigma as "practically important as it is theoretically significant" (p. 454).

Sir Francis Galton's seminal work, *Hereditary Genius* (1892/1914), surveyed and analyzed the generational lineages of 19th Century men of scholarly and political reputation as well as sporting renown. From his results, Galton (1892/1914) theorized genius (ability) and physical prowess (sporting talent) are hereditarily "endowed by nature" (p. 2), and even in the presence of training and learning opportunities performance development has limits. In a phrase, Galton (1892/1914) submitted noteworthy performers are most frequently the offspring of eminent bloodlines. In turn, Galton (1892/1914) described peak sporting performance as a "rigidly determinant quality" (p. 13), and he theorized "there is a definite limit to the muscular powers of every man, which he cannot by any education or exertion overpass" (p. 13). Deeper still, Galton (1892/1914) defined natural ability, manifested in expert performance, as "a union of three separate qualities – intellect, zeal, and power of work" (p. 41).

Although Galton's theory of inherited talent continues to be embraced, reinforced, and debated among groups of researchers and practitioners today, a growing body of sport and educational research is also focused on the triad of talent identification, talent development, and expert performance (Durand-Bush & Salmela, 2001; Ericsson et al., 1993; Ericsson, 1997; Ericsson, 2008, June; Ericsson & Lehman, 1996; Ericsson, Roring & Nandagopal, 2007; Ericsson & Ward, 2007; Howe et al., 1998; Simonton, 1999). From the perspective of talent development, Howe et al. (1998) argued heritable "giftedness" is likely unfounded due to the following factors: (a) inadequate supporting evidence; (b) sufficient counter-evidence; (c) empirical results demonstrating talent development as a result of deliberate practice and training; (d) evidence substantiating training as a required ingredient in achieving expertise; and, (e) verification of high-level performances from previously low-performing individuals as a result of proper training and mindset. On the other hand, Hyllegard, Radlo, and Early (2001) compared

the nature v. nurture beliefs of 138 collegiate women's sport coaches. Specifically, Hyllegard et al. (2001) surveyed collegiate coaches to determine how their perceived value of innate talent compared to their belief in the developmental effects of deliberate practice when they assess the source of superior athletic performance. In this study (Hyllegard et al., 2001) coaches principally attributed athletic achievement as a byproduct of innate talent "followed by intrinsic motivation and effort" (p. 203). Plainly stated, coaches viewed deliberate practice as secondary to natural talent when they defined the source of athletic achievement. In sum, whether an individual's convictions rest with natural talent, talent development, or a hybrid of the two, professional scouts continually describe the "cause" or "source" of baseball performance expertise with phrases and words such as "talent," "natural ability," "potential," "gifted athlete," and "you can't teach that."

Defining, Identifying, and Probing the Presence of Talent

Although the term is commonly used with varied meanings across many domains, scientific attempts to conclusively define "talent" resist consensus and acceptance. When individuals witness exceptional performance, Ericsson (1998) claimed a common societal tendency is to explain unexplainable expert performances with innate or natural talent attributions. Stated differently, Simonton (1999) claimed that perception of hereditary natural talent "is firmly engrained in everyday psychology" (p. 435). Vaeyens et al. (2008) underscored the lack of agreement regarding "how talent should be defined" and the absence of an "accepted theoretical framework to guide current practice" (p. 703). Howe and colleagues (1998) conveyed their desire for an exact definition of talent as well as their belief in the impossibility of this objective due to "domain-specific" boundaries, all of which require different types and quantities of traits and skills.

Howe et al. (1998) also professed references to "innate talent" are fraught with inexactness, and people who "believe that innate talent exists also assume that early signs of it can be used to predict future success" (p. 399). From another perspective, Csikszentmihalyi, Rathunde, and Whalen (1993) claimed "diversity is the built-in creative potential of our species" (p. 25), and the mysterious distribution of talent "originate[s] with the genes of some ancestor" (p. 24). However, Csikszentmihalyi and colleagues (1993) also characterized talent as a developmental phenomenon, instead of an all-or-none byproduct of heredity.

Ericsson and colleagues (1993; 1996; 2007; 2007, June) refuted the Galtonian notion of heritable talent because science has yet to identify the existence of DNA gene patterns that confirm the presence of innate ability. Ericsson (1996; 1998) stressed the absence of empirical links that confirm a relationship between innate ability and the display of expert performance. Said differently, heritable genetics, with the exceptions of body size and/or height, does not prove or negate the possibility of developing expert performance in healthy individuals. To this end, Ericsson (2007) rebutted the "talent account," defined as the belief that expert performances "depend on the special biological potential that can be identified in some young children" (Howe et al., 1998, p. 399), and the concept's inference that human talent is hereditarily bestowed and not the result of training and experience (Ericsson, 1998).

In contrast to Ericsson, Freeman (1998) stated random selection combined with practice never in itself produced an individual of "world-class achievement," and, without evidence that innate ability is unnecessary for producing expert performance, the "'talent account' will remain in force among researchers" (p. 415). From yet another perspective, Csikszentmihalyi and colleagues (1993) defined talent not as something comprised of elements only found or observed in nature; rather, they described talent as a socially constructed stamp of recognition that unfolds

when good traits with social value are displayed and acknowledged. Although Tranckle and Cushion (2006) later reinforced this theory and claimed "talent can only be talent and recognized as such where it is valued" (p. 266), Tesch-Romer (1998) summarily defined talent as "a powerful myth in the development of expertise" (p. 427). More specifically, Tesch-Romer (1998) questioned the existence of innate talent and stated "'attributed talent' resides only in the minds of the observers" (p. 427).

Describing talent as an inferred construct, Howe et al. (1998) cautioned that signs of youthful ability do not imply or confirm the presence of innate talent when found in environments where learning or practice opportunities exist. Howe and colleagues (1998) suggested one's belief in the nature debate can be a roadblock for uncovering the origins of talent, and they proposed a standard framework for qualifying talent's existence. Specifically, Howe et al. (1998) presented five filters to apply when attempting to empirically qualify the presence of innate ability (natural talent): (a) it is genetically conveyed; (b) it transmits early signs of existence; (c) it supports a method to forecast expertise; (d) it exists only in a few individuals; and, (e) it has unequivocal effects.

Viewing talent identification and development as an integrated and perpetual dynamic, Regnier et al. (1993) stated the "ultimate goal" of talent identification research is performance prediction. To this end, empirical attempts to predict sport performance are laden with methodological limitations because "prediction is first based upon accurate description and explanation" (Regnier et al., 1993, p. 290). Specifically, Regnier et al. (1993) described "top-down" talent identification research as classical a priori hypothesis testing and "bottom-up" talent identification research as qualitative investigations focused on uncovering insights and the "language of the sport performers themselves" (p. 291). Deeper still, Regnier and colleagues

(1993) advocated for "bottom-up" inquiry in the study of sport talent identification because of the inherent complexities and reductionist tendencies associated with the quantitative methodology of "top-down" research. Paralleling this research paradigm preference, Tranckle and Cushion (2006) espoused a phenomenological approach for defining talent in sport in order to "explore the essence of human experience by preserving the perspectives of the participants" (p. 279).

Durand-Bush and Salmela (2001) questioned the accuracy of talent identification research in light of science's inability to clearly diagnose the origin of talent and/or its components. Pankhurst and Collins (2013) also doubted the evidentiary basis of current talent identification and development systems, and they implied athletic potential is often unrealized or wasted because of the misuse and/or absence of viable theory applied to daily practice. Citing low success outcomes for talent identified junior athletes later developing into expert adult performers, Pankhurst and Collins (2013) stated "the evidence is that current methods of TI [talent identification] and TD [talent development] do not develop world class performers" (p. 93).

Schneider (1998) registered opposition against models that do not recognize the existence of innate talent, but he also acknowledged affinitive effects between deliberate practice and performance expertise. As a result, Schneider (1998) identified "the need for alternative models" (p. 424), and he called for an integrative construct "that considers both basic abilities/aptitudes and deliberate practice as determinants of exceptional performance" (p. 424). Conceptually, Schneider (1998) espoused a talent identification system that distinguishes above average domain ability while at the same time he professed "noncognitive variables such as commitment, endurance, concentration or motivation determine peak performance" (p. 424).

For Weiss and Shanteau (2014) judgment represented the foundational core of talent identification, and judges, metaphorically, serve as "measuring instruments." The authors theorized that improved judgment (e.g. talent identification) correlates with discriminate and consistent assessment of specific behaviors. In addition, Weiss & Shanteau (2014) disregarded the notion of experts as outliers and viewed performance expertise along a continuum of capability. More specifically, Weiss and Shanteau (2014) identified three properties of expert judgment (i.e. discrimination; consistency; and, validity), and from these properties developed the Cochrane-Weiss-Shanteau index (CWS) to calculate "judgmental proficiency." In calculating this statistic, discrimination and consistency represent observable measures. Specifically, discrimination identifies the strength of performance behaviors while consistency approximates performance "test-retest reliability" (p. 449). Validity, however, represents a nebulous property because accurate talent assessment hinges on the existence of "ground truth" and "appropriate information," both of which are typically unknown and/or ill defined (Weiss & Shanteau, 2014, p. 449). As a result, although the CWS does not "guarantee accurate judgment" in talent identification, in the absence of ground truth it is designed to calculate judgment discrimination and consistency (Weiss & Shanteau, 2014, p. 450).

Tastes for Talent in Sport

Abbott and Collins (2004) highlighted the "essential role of psychology in the ability of individuals to fulfill their sporting potential" (p. 395), and they appealed to talent scouts and researchers for the adoption of a "formative as opposed to a summative assessment approach" to talent identification and development. The authors (Abbott & Collins, 2004) maintained true potential is easily missed when talent identification fails to recognize the spiraling and adaptive dynamics of psychological skills in the "conversion of potential into achievement" (p. 396).

Emphasizing the existing literature's "insufficient consideration" of psychological factors and advocating for the "reconceptualization" of talent identification and development as a dynamic, multidimensional process fueled by the interdependency of mind and body, Abbott and Collins' (2004) review argued for reducing the division between the theory and the practice of talent identification and development. Abbott and Collins' (2004) integrative model for talent identification and development focused on the "interplay" between: (a) mind and body performance determinants; (b) environmental opportunities for training and learning support; and, (c) "self-regulatory learning strategies/psycho-behaviors" (pp. 399-400). In sum, Abbott and Collins (2004) identified "capacity to develop" and "psycho-behavioral strategies" as the missing perspectives and the empirical bridge for understanding the interrelation between potential and achievement (p. 398).

Abbott and Collins (2002; 2004) targeted the costly mistakes and missed opportunities associated with limited evaluations (e.g. "one-off") and/or unidimensional (e.g. height) systems for talent identification. In addition, Abbott and Collins (2004) promoted movement away from static predictive models of talent in favor of empirical approaches that investigate the "psychological determinants" (p. 397) of potential and performance and embrace "change as a function of time" (p. 396). Time in this context referred to the formative effects of physical maturity and experience, and static in this frame of reference illustrated the limitations and implications associated with stationary measurements of performance variables in successful athletes.

The nexus of Abbott and Collins' (2002; 2004) case is grounded in the differentiation between the "determinants of performance and determinants of potential" (2004, p. 405) as well as their belief in the transformational role of psychological skills in the process of talent

development. To this end, Abbott and Collins (2004) underscored the synergistic impact of attitude and ability and stipulated "the motivation to commit high training loads over an extended period is a (if not 'the') crucial determining factor in acquiring and maintaining expertise" (p. 399). Focused on extracting a deeper understanding of performance expertise, Johnson and colleagues (2008) investigated the phenomenological differences between elite and non-elite swimmers through the lens of coaches who simultaneously coached both athlete groups. In this study, coaches identified "commitment and willingness to work hard of their own volition" (Johnson et al., 2008, p. 424) as attributes that separate elite and non-elite performers, but coaches also identified the prominent role of innate talent and qualified "it is necessary but not sufficient" (p. 426).

Although previous efforts to empirically isolate the personality attributes of elite athletes failed to be conclusive (Friend & LeUnes, 1990; Morris, 2000; Williams & Reilly, 2000), studies have confirmed that "only psychological factors are able to explain the performance of athletes who are looking to maintain their success" (Abbott and Collins, 2004, p. 397). For example, in their investigation of 17 world champion athletes, Kreiner-Phillips and Orlick (1993) reported declining performance proficiency and failed attempts to repeat as champions when prior championship performers became results-focused and entangled in perceived and/or external expectations. On the other hand, prior championship athletes who successfully continued to repeat as champions positively embraced the process of training and competition with detailed performance plans, balanced perspectives, a fine focus on task objectives, and a sense of enjoyment related to the challenge.

In a longitudinal examination of chess players, Howard (2012) investigated the potential correlation between persistent effort and players' views regarding innate talent. In this study

(Howard, 2012), nearly all international master level players surveyed self-defined as entity theorists. Entity, in this context, characterized a performance perspective that "depends at least partly on innate ability (the entity), an ability which cannot be altered" (Howard, 2012, p. 95). However, master chess players' also self-disclosed their belief in the primacy of innate chess ability had minimal effect on their "performance and motivation" (Howard, 2012, p. 102). In contrast to Howard's (2012) results, MacNamara, Button, and Collins (2010) applied a grounded theory approach to explore the psychological attributes of seven elite athletes across six sports. The content analysis of their athlete interviews "de-emphasized the significance of physical attributes in attaining excellence" (p. 62). Revealingly, MacNamara and colleagues' (2010) subjects also self-disclosed a vivid awareness of their physical weaknesses, acknowledged the superior physical strengths of rival opponents, and conveyed belief in the efficacious role of psychological attributes leading to expert performance.

In a study designed to determine the predictive power of psychological and physical skills to forecast professional baseball performance and survival, Smith and Christensen (1995) investigated 104 minor league players. Smith and Christiansen's (1995) results revealed four potentially interdependent dynamics between psychological and physical talents: (1) coping and physical skills equally explained variance in batting average; (2) physical skills accounted for less variance in pitchers' earned run average compared to coping skills; (3) psychological skills reliably forecasted future professional baseball survival; and, (4) confidence and achievement motivation proved to be the most consistent psychological performance predictors for baseball hitters and pitchers. Further substantiating the efficacy of psychological talents in high performing athletes, Gee and colleagues' (2010) personality profile analysis longitudinally tracked the careers 124 NHL draft picks and acknowledged "top performers possess an above

average competitive disposition, are motivated by challenge and reward, confident in their ability to succeed, are open to coaching and feedback, and can operate both independently and as part of a group" (p. 31).

Christensen (2009) explored Danish soccer coaches' talent identification processes to diagnose the rationality and the objectivity of their decision-making paradigms. Similar to other researchers (Abbott and Collins, 2004; Lewis, 2004; Morris, 2000; Williams & Reilly, 2000), Christensen (2009) stressed the importance of talent identification in limiting missed opportunities for discovery so "that clubs or national teams do not lose time, money, and prestige by investing in the 'wrong' players" (p. 366). In turn, Christensen's (2009) qualitative analysis mapped three elements of talent identification evident in Danish soccer coaches when they scout prospective players. Specifically, Danish soccer coaches: (a) systematically employed personal preferences to "their visual experience to recognize patterns of movement among the players;" (b) displayed partiality for players they perceived to "exhibit a potential to learn, practice, and improve;" and, (c) they socially influenced the identification of talent in Danish soccer players as "arbiters of taste" (Christensen, 2009, p. 365).

Christensen (2009) labeled coaches' personal preferences as their "practical sense" (p. 366), and he defined a coach's practical sense as implicit soccer knowledge and a "feel for the game" that primarily results from "hands-on and incorporated knowhow" that is "founded on practical intuition or habitus" (p. 368). This practical sense is born of a body of soccer training and experience at high levels of competition (Christensen, 2009). Morris' (2000) review of talent identification in soccer provided further insight and stated "scouts and coaches appear to make judgments based on their own experience of the game, as former players, trainers, coaches or spectators" (p. 721). Deeper still, Jones, Armour and Potrac (2003) employed an interactionist

methodology in a case study of an elite soccer coach and defined coaching "know how" as adaptive thinking born of experience and developed "as you go along" (p. 219).

Christensen's (2009) qualitative investigation also identified coaches' "classificatory schemes," described as "categories of perception that become a particular taste" (p. 368). For example, these schemes serve as triggers that signal soccer coaches when a prospect's performance looks right and when it does not. In a classic study, Chase and Simon (1973) investigated what master chess players "see" in their mind's eye when they view a chess position. The results of this experiment (Chase & Simon, 1973) revealed that superior players demonstrate the "ability to encode larger chunks of information" and make "right" moves more quickly and frequently compared to less experienced players (p. 80). Nash and Collins (2006), in an examination of expert coaching, described coaching wisdom as tacit knowledge evidenced when "certain distinct cues appear to link current situations to past experiences, which may explain the coach's seemingly instinctive behavior" (p. 471). Christensen (2009) depicted coaches' talent identification knowledge as a sight-based byproduct of their "constant observation of players" (p. 372). Similarly, Day (2011) acknowledged the existence of skilled coaches who, as a result of extensive experiential knowledge, have the ability to "see" talent and predict potential, while Starkes and Helsen (1998) reported "highly skilled coaches maintain that they can 'see' talent" (p. 425).

Christensen (2009) theorized "the logic of sight is transferred to the logic of knowledge" (p. 372), and soccer coaches' aptitude for talent identification reflected "something that originates from intuition" (p. 371). In sum, Christensen's (2009) interpretative analysis of soccer coaches' talent identification processes traced visual observations that over time developed into schemas of pattern recognition based on a personal preference for specific player attributes and

then became the foundation for confident decision making when selecting new players. In a phrase, Christensen (2009) referred to "the glimpse that is recognized as an entirety" (p. 373), and he described coaches' talent identification logic not as a process "based on evaluations of isolated elements" (p. 373) but rather as an "interaction of knowledge and memory" (p. 367) that "builds on a practical sense of visual impressions as a whole" (p. 373).

Christensen (2009) also questioned soccer coaches' "image of talent" to uncover their "individual tastes and preferences" (p. 375). In response to his query, coaches identified "soccer skills," comprised of "game intelligence" and "peak competences," and "personal qualities" as their focal targets in identifying talent in prospective players (Christensen, 2009, p. 375). Game intelligence in this context referred to a soccer player's ability to "read and predict" the flow and movement of the game, and peak competences signified the physical and technical soccer skills (e.g. tools) the pace of the game demands for competitive play. All elements of soccer talent considered, "personal qualities predominated" (p. 375) as the key elements for talent identification among Danish soccer coaches, and they pointed to "attitude" as "a dominant category in the classificatory scheme that distinguishes one highly skilled soccer player from another" (Christensen, 2009, p. 376).

Although Christensen (2009) identified a process of sight-based scouting knowledge, he also declared recognizing talent is altogether different from describing talent. Additionally, Christensen's (2009) analysis stipulated soccer coaches evaluated both a prospective player's "present makeup" and his "presumed potential to learn, to practice, and to improve" (p. 377). In turn, soccer coaches affirmed their belief in the "preeminence of hard work and commitment" (p. 374), and they routinely tested the validity of their first impressions by conducting individual prospect meetings.

Christensen's (2009) investigation exposed a synergistic attraction between psychological makeup and sport-specific skills in Danish soccer coaches' "eye" for talent identification. To this end, Christensen (2009) concluded "the power and the expertise to judge observable skills" is highly valued and socially conferred upon Danish soccer coaches thereby making them "arbiters of taste" (p. 377). Specifically, coaches own what Christensen (2009) labeled the "'doxical' (cf. doxa) knowledge" of Danish soccer, and he theorized this social construction restricted the dissemination of talent identification knowledge "by an unwillingness to include different viewpoints" and magnified "the possibility of mistakes" (p. 378). As a result, Christensen (2009) reasoned talent identification becomes a "self-perpetuating cycle of construction and reconstruction" (p. 378). Comparatively, Lewis (2004) also revealed the possible orthodoxy of professional baseball scouts talent identification knowledge and decision making when he described scouts as those who "decide who gets to play and, therefore, how it is played" (p. 15).

Summary

In my review, I investigated applied literature and scholarly research focused on discovering how professional baseball scouts define talent, identify talent, forecast potential, and make player selections in the high-risk financial industry of Major League Baseball (MLB). I assembled my findings in a three-part framework, beginning with the role transformations of professional baseball scouts and how MLB's legal, contractual, and economic history shaped scouts' talent identification responsibilities and methods. In section two, I conducted a four-part investigation of the fundamental talents, tools, and attributes scouts described as antecedents to expert baseball performance, and I concluded my review with a scientific summary of talent identification. This scientific summary of talent identification explored the nature v. nurture

debate; empirical definitions and methodologies for talent and talent identification; and, tastes for talent among sport experts. In sum, my review integrated scholarly talent identification research across sport and other domains and aligned it with the applied talent identification practices and decision making patterns exhibited by professional baseball scouts.

The role of the professional baseball scout developed and transformed in response to MLB's shifting economies, player acquisition methods, and contractual guidelines (Kerrane; 1999; Keri, 2006; Monteleone, 1995; Rickey, 1965; Rymer, 2013; Spurr, 2000; Staudohaur et al., 2006; Story, 2000; Weiler & Roberts, 1998). In the early years, Major League Baseball featured family-owned franchises that exerted ownership control over large farm systems in an affordable player salary market without the strictures of a First Year Player Draft, the Major League Scouting Bureau, or free agency. However, today's MLB talent identification landscape is bounded by unionization and contractual guidelines designed to protect ownership interests while allowing labor mobility for tenured players. These realities, combined with average Major League player salaries exceeding \$4 million (Petchesky, 2015) and a talent development system (i.e. minor leagues) that typically only yields 10 percent success (Burger & Walters, 2009), present an opportunity for talent identification and decision-making exploration in a high stakes climate.

The early periods of Major League Baseball masked talent identification uncertainties by operating large, low-cost farm systems designed to yield quality from quantity (Kerrane, 1999; Story, 2000). Branch Rickey, the father of professional baseball scouting, framed and focused the identification of baseball prospects' physical talents into three areas: (1) the arm; (2) the legs; and, (3) the power (Monteleone, 1995). Rickey (1965) also implied that a fourth "talent," a player's love for playing the game, is perhaps the most important attribute of all. These talents,

tools, and attributes continue as elements found in professional baseball scouting reports today (Kerrane, 1999; Nyman, 2008; Shanks, 2005; Story, 2000; Winegardner, 1990), and scouts' roles maintain sight-based prospect evaluations and future projections of performance potential.

In the late 1990s while faced with losing records, ineffective draft picks, and a low payroll, the Oakland A's questioned the essence of winning baseball as well as the social dynamics, biases, and future focus prevalent in Draft-era professional baseball scouts (Armstrong, 2004; Hakes & Sauer, 2006, Summer; Keri, 2006; Lewis, 2004; Roberto, 2005; Staudohar et al., 2006; Thaler & Sunstein, 2003). In their analysis, Oakland evaluated longitudinal MLB statistics to develop a predictive model for winning baseball that ultimately pivoted on strike zone control and highlighted the efficacy of on-base-percentage (OBP) - an undervalued attribute in the baseball talent market (Lewis, 2004; Roberto, 2005; Thaler & Sunstein, 2003). As a result, Oakland used OBP as an objective talent assessment measure because it substantiated the presence of baseball skills and psychological attributes that foster winning baseball and reduced the complexity of future performance projections. In addition, some authors suggested professional baseball scouts can be influenced by biases and overestimate future performance (Burger & Walters, 2009; Lewis, 2004; Roberto, 2005; Thaler & Sunstein, 2003). As a group, scouts typically rely on instinct and intuition for talent identification, and when they "see" prospects' psychological attributes they commonly use the term "makeup" (Kerrane, 1999; Shanks, 2005; Story, 2000; Winegardner, 1990). Scientifically, if "makeup" can be more reliably identified then talent identification and expert performance potential are assumedly less frequently misjudged.

Talent, although difficult to define, is a valued commodity and debates regarding its origins and "causes" (i.e. nature v. nurture) are long-standing (Durand-Bush & Salmela, 2001;

Ericsson, 1998, June; Ericsson, 2007; Ericsson & Lehmann, 1996; Ericsson et al., 1993; Ericsson et al. 2007, June; Ericsson & Ward, 2007; Freeman, 1998; Howard, 2012; Howe et al. 1998; Johnson et al., 2008; Schneider, 1998; Simonton, 1999; Tesch-Romer, 1998). On one hand, scholars have yet to substantiate a scientific relationship between natural ability, genetics, and/or expert performance (Ericsson, 1998, June; Ericsson, 2007; Ericsson & Lehmann, 1996; Ericsson et al., 1993; Ericsson et al. 2007, June; Ericsson & Ward, 2007). On another hand, some scholars contend deliberate practice applied to random subjects does not ensure the development of expert performance (Freeman, 1998; Regnier et al., 1993). In the end, the ultimate goal, of professional baseball scouts and essentially all domains in pursuit of expertise, is accurate performance prediction. However, identifying talent and forecasting potential expertise are difficult in the face of uncertain definitions, antecedents, and methods (Csikszentmihalyi et al., 1993; Ericsson et al., 1993; Howe et al., 1998; Pankhurst & Collins, 2013; Regnier et al., 1993; Simonton, 1999; Tranckle & Cushion, 2006; Vaeyens et al., 2008).

Over nearly the past four decades, an emergent body of research included multidimensional, integrative, and adaptive theories for talent identification and development, and these works described and explored how expert performers think and train differently than non-experts (Abbott & Collins, 2002; Abbott & Collins, 2004; Chase & Simon, 1973; Csikszentmihalyi et al., 1993; Durand-Bush & Salmela, 2001; Ericsson, 1998, June; Ericsson, 2007; Ericsson & Lehmann, 1996; Ericsson, 1993; Ericsson et al. 2007, June; Ericsson & Ward, 2007; Howard, 2012; Howe et al. 1998; Johnson et al., 2008; Kreiner-Phillips & Orlick, 1993; Simonton, 1999; Smith & Christensen, 1995; Williams & Reilly, 2000). These works identified the tendency to over-focus on anecdote and intuition in sport talent identification (Christensen, 2009; Ericsson, 1998, June; Ericsson et al., 2007, June; Jones et al., 2003; Morris, 2000; Nash &

Collins, 2006; Starkes & Helsen, 1998; Tesch-Romer, 1998), highlighted the dynamic (as opposed to static) nature of talent development (Abbott & Collins, 2004; Bloom, 1985; Csikszentmihalyi et al., 1993; Regnier et al., 1993), and illuminated the efficacy of motivational factors, support networks, and focused training in expert performers (Abbott & Collins, 2004; Bloom, 1985; Csikszentmihalyi et al., 1993; Ericsson, 1998, June; Ericsson, 2007; Ericsson & Lehmann, 1996; Ericsson et al., 1993; Ericsson et al. 2007, June; Ericsson & Ward, 2007; Howe et al., 1998; Schneider, 1998).

Athletic talent and potential are often unrealized, undiscovered, or wasted (Lewis, 2004; Pankhurst & Collins, 2013), and limiting these missed opportunities saves professional sport organizations time and money (Abbott & Collins, 2004; Morris, 2000; Williams & Reilly, 2000). Time and money reflect the socially constructed value of sport expertise, but sport science is only beginning to empirically uncover the spiraling and adaptive dynamics involved in transforming talent and potential into achievement. Many of these studies are environmentally focused, embrace the scope of developmental capacity, and underscore the interdependency of mind and body (Abbott & Collins, 2002; Abbott & Collins, 2004; Csikszentmihalyi et al., 1993; Ericsson, 1998, June; Ericsson, 2007; Ericsson & Lehmann, 1996; Ericsson et al., 1993; Ericsson et al. 2007, June; Ericsson & Ward, 2007). Across several studies, this interdependency is portrayed as a synergy between attitude and ability and highlights the efficacy of: commitment and hard work (Johnson et al., 2008); motivation and discernment (Howard, 2012; MacNamara et al., 2010); and confidence and coping skills (Kreiner-Phillips & Orlick, 1993; Smith & Christensen, 1995).

Although empirical investigations of sight-based talent identification are minimal, the results of these works highlighted the confluence of domain-specific experiential memory (Chase

& Simon, 1973; Jones et al., 2003; Morris, 2000), sight (Christensen, 2009; Day, 2011; Starkes & Helsen, 1998), and the logic of perceptual knowledge (Chase & Simon, 1973; Christensen, 2009). To this end, a gap for analysis opens for examining the decision-making realm of professional baseball scouts. Specifically, if sight-based baseball talent identification is born of experiential preferences, then forecasting potential is possibly a byproduct of personal taste. An exploration of these experts' tastes for talent potentially illuminates how information is assessed, interpreted, and decisions are made in Major League Baseball. In the subsequent section I outlined key gaps within the applied and empirical literature to guide this specific study.

Gaps in the Literature

Most talent research is focused on defining the construct or exploring talent development, not on how talent is identified and prospects selected (Christensen, 2009). In the business of professional baseball, scouts' talent identification effectiveness pivots on two realities: (1) nearly all players require minor league development; and, (2) most minor league players never appear in a Major League game. However, despite baseball scouts' influential role in identifying talent to lay the foundation for franchises' competitive success (Lewis, 2004; Thrift & Shapiro, 1990), research exploring their decision-making judgment and how they define talent, attributes, and potential is minimal and includes a number of gaps. Two gaps appeared meaningful for understanding how these experts assess talent and make judgments in competitive, high-finance professional baseball. The first gap involves the scarcity of studies analyzing how baseball scouts make meaning of what they see and forecast potential. The second gap concerns the absence of qualitative studies examining how a scout's mindset interprets the mindset of a MLB prospect and the value scouts place on psychological attributes.

Gap #1: Visual Talent Identification and Forecasting Expertise in Baseball

Scouting wisdom is passed on by word of mouth and the dialogue of experiences (Kerrane, 1999; Shanks, 2005; Story, 2000; Winegardner, 1990). To this end, questioning the Book's validity requires a willingness to uncover performance clues with your eyes and interpret what others may not see (Armstrong, 2012; Lewis, 2004; Roberto, 2005).

The legendary scouts tell us that each play and player are unique (Winegardner, 1990), and behind every draft pick are scenes of scouts' personal observations, comparisons, and future projections (Kerrane, 1999; Shanks, 2005). Scouts build a player history from purposeful watching, evaluation, and comparison, all for the purpose of forecasting future performance and making decisions (Kerrane, 1999; Shanks, 2005; Story, 2000; Winegardner, 1990).

While some scholars challenge the effectiveness of professional baseball scouts' talent identification and judgment (Burger & Walters, 2009; Koz et al., 2012; Lewis, 2004; Nyman, 2008; Roberto, 2005; Spurr, 2000; Thaler & Sunstein, 2003), only a fraction of talent research explores talent identification through the eyes of scouts or coaches (Christensen, 2009; Jones et al., 2003; Morris, 2000; Nash & Collins, 2006). My review of literature did not uncover studies that examined how professional baseball scouts interpret what they see as they forecast future performance potential and make decisions. In this respect, my study will chronicle professional baseball scouts' decision-making processes to reveal how they define talent and potential when identifying and eliminating prospective Major League players.

Gap #2: Assessing Psychological Attributes in Baseball

Although verifying physical measures of baseball talent can create feelings of judgment security (Lewis, 2004), professional baseball scouts are employed to forecast future performance

expertise (Kerrane, 1999; Story, 2000). Optimally, scouts search for prospects with great physical talent *and* psychological mindset (Kerrane, 1999; Monteleone, 1995; Shanks, 2005; Story, 2000), but this complete prospect package seldom develops with parallel timing (Winegardner, 1990). Said another way, all prospects with exceptional physical measures of baseball talent do not exhibit exceptional mindsets, and all prospects with exceptional mindsets do not demonstrate exceptional physical measures of baseball talent.

Some scholars in my review underscored the synergistic impact of psychological attributes and physical ability (Abbott & Collins, 2002; Abbott & Collins, 2004; Schneider, 2008), and other researchers highlighted the value of this interdependency in the display of expert performance (Ericsson, 1998, June; Ericsson, 2007; Ericsson & Lehmann, 1996; Ericsson et al., 1993; Ericsson et al. 2007, June; Ericsson & Ward, 2007; Howard, 2012; Johnson et al., 2008; Kreiner-Phillips & Orlick, 1993; MacNamara et al., 2010, Smith & Christensen, 1995). Although my review of applied literature stressed the impact of a prospects' mindset as a harbinger for advancement to the Major Leagues (Kerrane, 1999; Monteleone, 1995; Rickey, 1965; Story, 2000; Shanks, 2005), talent identification research does not include qualitative studies examining how baseball scouts value and interpret prospects' psychological attributes. Talent is highly valued, and my investigative results may shed light on how professional baseball scouts value and interpret the interdependency of physical and psychological attributes.

The gaps identified expose an opportunity to explore talent identification knowledge and interpretative decision-making through the lens of professional baseball scouts. My study focuses on talent assessment and judgment within a sport industry that exhibits low odds of advancement and a narrow timeline for productive service, and I aspire to advance the literature to better understand the baseball talents and attributes fundamental to performance expertise. In

the subsequent section, I described the four theories I selected to analyze and to interpret the data that I collected from professional baseball scouts.

Analytical Theory

Interpreting talent identification and decision-making through the lens of talent development and reflective practice theorists redirects our sight to the bottom-up perspectives of expert and potential expert performers' experiences in action. From this perspective, I selected four theorists to create a scaffold for viewing and illuminating the essence of how professional baseball scouts define player attributes and subsequently make decisions to identify or eliminate Major League prospects.

I chose talent development and performance expertise theorists because nearly all MLB draft selections spend lengthy minor league apprenticeships developing their talent and only 10 percent receive the call to advance to the Major Leagues (Burger & Walters, 2013; O'Kennedy, 2013). Inductively, 90 percent of MLB draft selections are potentially the result of scouts' misjudged talent identification, and, in the event heritable talent remains empirically unconfirmed and/or insufficient to predict performance expertise, talent assessment is plausibly best diagnosed from the vantage of talent development and performance expertise theorists. In addition, I selected the theory of reflective practice to analyze scouts' "intuitive processes" (Schon, 1983, p. 49) with regard to talent identification and prospect decision-making.

Two theorists I selected, Bloom (1985) and Csikszentmihalyi et al. (1993), conducted exploratory studies to collect talent development insights from gifted and expert performers.

Bloom (1985) embraced human potential and investigated talent development through the lens of world class performers, their parents, teachers, and coaches. Bloom's (1985) landmark work,

Developing Talent in Young People, used structured interviews to retrospectively diagram the process of talent development within expert pianists, sculptors, swimmers, tennis players, mathematicians, and neurologists. I selected Bloom (1985) and his analysis of the characteristics and career stages of world class performers to analyze how professional scouts define baseball prospects' attributes.

Following Bloom's work, Csikszentmihalyi et al. (1993) employed the Experience Sampling Method (ESM) to diagnose the longitudinal talent development of gifted high school students in art, music, math, science, and athletics. Csikszentmihalyi et al. (1993) explored what drives high school students to (and not to) develop their talent, and, like Bloom (1985), Csikszentmihalyi and colleagues (1993) defined talent development as a product of favorable, nurturing environments. In addition, Csiskzentmihalyi et al. (1993) identified "psychological complexity" as the catalyst for talent development, and I selected this theorist to analyze how scouts value and interpret prospects' psychological attributes.

In his seminal work, Ericsson et al. (1993) presented a theoretical framework outlining the role of deliberate practice in the development of performance expertise. Like Bloom (1985), Ericsson's empirical stance resonated belief in the capability of talent development for all healthy individuals, and I selected Ericsson's theory of performance expertise and deliberate practice to analyze how professional baseball scouts make meaning of what they see and forecast baseball performance potential.

Ericsson depicted the realization of performance expertise as the result of prolonged deliberate practice. Schon (1983) pioneered the theory of reflective practice defined as a "special expertise" (p. 49) that is revealed through the "tacit knowing-in-action" (p. 49) of proficient practitioners. In this context, Schon exposed both the limitations and the tendencies of

academia to lean upon science and technology for all answers associated with problems and dilemmas related to professional practice. More importantly, Schon illustrated and defined the "know-how" skilled practitioners develop and exhibit as a byproduct of their experiential reflections. I chose Schon (1983) and his concept of experiential "knowing-in-practice" to analyze how veteran professional baseball scouts employ their reflection and intuition when making decisions to identify or eliminate Major League prospects.

Bloom: Development of Talent

Bloom's publication (1985), *Developing Talent in Young People*, paved the oft-cited groundwork for subsequent researchers' environmental talent development explorations and reviews (Abbott & Collins, 2004; Csikszentmihalyi et al., 1993; Durand-Bush & Salmela, 2001; Ericsson et al., 1993; Howe et al., 1998; Pankhurst & Collins, 2013; Regnier et al., 1993; Tranckle & Cushion, 2006). More specifically, Bloom's investigation (1985) culminated a four-year retrospective exploration of the talent development process in 120 world class performers under the age of 40 across four fields (i.e. psychomotor, aesthetic, musical, artistic) and six domains (Olympic swimmers, tennis champions, concert pianists, artists, research neurologists and research mathematicians). In addition, and to comprehensively capture retrospective data, Bloom and his University of Chicago research team also mined the narrative responses of subjects' parents and significant teachers/coaches.

With the assistance of experts and scholars, Bloom (1985) defined talented subjects as those who "demonstrated an unusually high level of demonstrated ability, achievement or skill" (p. 5). Deeper still, Bloom's (1985) preliminary assumption detailed the consideration that each society contains a large collection of potential talent "that can either be developed or neglected, depending in large measure on the environmental conditions" (p. 5).

Although seemingly detailed, Bloom (1985) designed his interview methodology to uncover the developmental processes that equipped his subjects for expertise across seven areas of inquiry: (1) special talent(s) evident in subjects' childhood; (2) childhood family support and talent direction; (3) quality and characteristics of teaching, coaching, and mentorship across subjects' talent development; (4) the genesis and type of subjects' motivation and self-satisfaction; (5) the amount of subjects' learning/training time invested in talent development; (6) other relevant individual elements of talent discovery and development; and, (7) values and habits that fueled subjects' increased commitment to talent development in pursuit of expertise. While lengthy, these categories served as interview question topics, and the results thereof formed Bloom's (1985) framework for the characteristics and career stages of talent development.

Bloom's (1985) stages of talent development, gleaned from both expert performers and their mentors and models of significant influence (e.g. parents, teachers/coaches), provided common ground generalizations and insights about how experts learn and spend their time. In addition, the inclusion of mentors and models revealed the prevalence of a significant finding: that is, "no one reached the limits of learning in a talent field on his or her own" (Bloom, 1985, p. 509). Talent development spanned over a 10-15 year period, and Bloom (1985) labeled his talent development stages the early, middle, and later years, or, in Regnier et al.' (1993) depiction, the stages of initiation (early years), development (middle years), and perfection (later years).

Bloom (1985) characterized the early years of talent development as a playful introduction to a talent field when subjects were initially mentored by a local, learning-oriented teacher/coach, and mutually supported by parents. Parents typically modeled encouragement, a

strong work ethic, and reinforced the virtues of giving best effort and achieving goals. The middle years featured a devotion to developing technical skills, fundamentals, and "a long sequence of learning activities that involve high standards, much time, and a great deal of hard work" (Bloom, 1985, p. 508). During the "development" period, parents made supportive commitments of time, finances, and personal sacrifice, while the profiles of teachers/coaches featured increased experience, dedication, skill, and training demands. The later years, or stage of perfection (Regnier et al., 1993), signified a tipping point when subjects' significantly intensified hours and commitment to their talent field and assumed the realization and personal identity of an expert performer. In this stage, parents moved to the background as supportive fans, while teachers/coaches stepped to the foreground in a bond of mutual respect and accountability partners focused on high achievement.

Bloom's (1985) stages are not hereditarily directed. Rather, these characteristics and career stages of talent development represent generalizable patterns informed by world class performers and their support networks. In turn, Bloom's (1985) summative deduction defined the ground truth result of his talent development theory: "what any person in the world can learn, *almost* all persons can learn *if* provided with appropriate prior and current conditions of learning" (p. 4).

Bloom's (1985) incremental steps of talent development closely paralleled professional baseball scouts' persistent talent identification question, "'which players are going to seek their level?" (Shanks, 2005, p. 338), and scouts defined "level" as the full realization of potential. Similarly, Bloom (1985) mapped the characteristics of talent development stages, and, comparatively, professional scouts identified "makeup" as the attributional characteristic and catalyst for baseball talent development.

I designed my investigation to fill a qualitative research void and explore how professional scouts interpret the mindsets of MLB prospects and forecast their future performance potential. I selected Bloom's (1985) theory of talent development and his analysis of the characteristics and career stages of world class performers to provide a framework to help me chronicle the decision-making processes of professional baseball scouts and uncover how they define talent and potential. In the next section, I explain Csikszentmihalyi et al.' (1993) theory of complexity and talent development, and I describe the relevance of this framework to help me understand the precursors of peak baseball performance and their value in talent identification.

Csikszmenthalyi, Rathude, & Whalen (1993): Complexity & Talent Development

The publication of *Talented Teenagers* by Csikszentmihalyi, Rathunde, and Whalen in 1993 detailed a four-year, longitudinal, mixed methods exploration of why some teenagers persist with talent cultivation and others do not. With the support of a University of Chicago research team, Csikszentmihalyi and colleagues (1993) focused on the "experience of talent" (p. 42) across the high school careers of 208 students nominated by their teachers to possess "the potential to pursue talent development to superior levels of proficiency" (p. 43). Specifically, the authors (Csikszentmihalyi et al., 1993) examined how adolescents "become committed to the development of their talent" (p. 5), and they posed the unanswerable question of how often do potential expert performers escape our discovery because of external roadblocks? External roadblocks in this context referred to the absence of support networks and personally challenging opportunities to develop, learn, and perform. Deeper still, Csikszentmihalyi et al. (1993) embraced an optimistic view of talent development, and they refuted the myth that "talent will

out" (p. 25), defined as the assumption innate talent will never fail to surface regardless of any environmental, opportunity, and/or relational roadblocks.

Csikszentmihalyi and colleagues (1993) characterized talent not as something comprised of elements only observed or found in nature. Rather, Csikszentmihalyi et al. (1993) defined talent as a socially constructed stamp of recognition that surfaces when good traits with social value are displayed and acknowledged. More specifically, Csikszentmihalyi et al. (1993) conceptualized talent as comprised of three elements: (1) individual traits; (2) cultural domains; and, (3) social fields. Csikszentmihalyi et al. (1993) explained individual talents as one part heritable and one part developmental, and they characterized cultural domains as socially meaningful performance benchmarks. In addition, social fields represented people and societal groups who judge and determine desirable performance levels (Csikszentmihalyi et al., 1993).

Focused on how teenagers' committal or noncommittal to talent development is effected by "daily experiences and self-perceptions" (p. 48), Csikszentmihalyi et al. (1993) employed a two-phase data gathering strategy. The primary component of phase one featured the Experience Sampling Method (ESM), a naturalistic, self-report channel for capturing subjects' internal thought and emotional expressions to comprehend optimal experiences, and phase two examined students' committal or noncommittal to talent development and the nature of their accomplishments. These details are noteworthy because the genesis of the ESM originated with the flow model of optimal experience, and Csikszentmihalyi and colleagues (1993) grounded their hypothesis in "the notion that complex systems are related to optimal experience, which in turn is related to growth in talent" (pp. 15-16).

Csikszentmihalyi and colleagues (1993) defined flow as "a subjective state that people report when they are completely involved in something to the point of *losing track of time and of*

being unaware of fatigue and of everything else but the activity itself" (p. 14). Csikszentmihalyi et al. (1993) also mapped the prevalent conditions present in flow states from over 7,000 ESM reports: (a) clear goals and feedback; (b) close alignment between an activity's challenges and one's ability to act upon or perform the challenges; (c) when learning, training, or performing the activity and actor simultaneously become one, as if flying on automatic pilot. In turn, Csikszentmihalyi et al. (1993) described an optimal system as complex, and they explained a complex mindset as two-dimensional thinking which embraces the interdependent opposites of constancy and change, or, in their words, complexity is the "simultaneous presence of differentiating and integrating processes" (p. 255). To this end, flow begets complexity because continual embrace of challenge on the boundary of one's current talents bridles boredom and apathy. Complex mindsets are therefore consistently striving for performance improvement in pursuit of flow. This complexity, according to Csikszentmihalyi et al. (1993), is both "cohesive and stable yet able to adapt and change when necessary" (p. 13), and "the balance of challenges and skill is never static" (p. 15).

Csikszentmihalyi et al. (1993) identified "psychological complexity" as the foundational organizing principle for understanding their theory of talent development. In this model, the poles of complexity (represented by constancy and change) are reconciled and the personalities found in talented teenagers are defined. As a result, Csikszentmihalyi et al. (1993) pointed to the importance of first identifying psychological complexity when assessing and judging talent and potential.

Although infrequently cited, Csikszentmihalyi et al. (1993) summarized eight factors associated with talent development in teenagers: (1) to develop talent, teenagers first need to be socially recognized with talent; (2) talented teens focus their concentration with an openness to

achieve, endure, and experience; (3) talented teens devote greater focus on and openness to developing their talents; (4) talented teens practice conservative sexual attitudes and better navigate relational distractions; (5) most talented teens reside in families that support the challenges of talent development; (6) teachers who support, enjoy, and stimulate talent development positively influence talented teens; (7) talent development in teens exudes self-satisfaction in current practice and an affinity for future rewards. The eighth factor potentially stands alone and serves as a guidon for talent identification: "a talent will be developed if it produces optimal experiences" (p. 252).

Baseball talent assessment is easiest when measures of physical performance (e.g. running time, throwing speed, hitting power) are Major League average or better. However, the low odds of advancing from the minor to the major leagues cast doubt on the notion that physical talent is the center against which baseball performance expertise can be reliably forecasted. That is, physical talents may reflect an incomplete picture of prospect potential.

Csikszentmihalyi and colleagues' (1993) flow state conditions of goal clarity, focused feedback, and open embrace of challenge correlates with scholars' empirical analyses of peak performance in sport (Kreiner-Phillips & Orlick, 1993). In addition, Csikszentmihalyi et al. (1993) profile of talented teenagers aligned closely with scouts' affinity for and descriptions of competitive makeup (Shanks, 2005; Winegardner, 1990).

My study seeks to understand how professional baseball scouts value and define prospects' attributes, and I selected the Csikszentmihalyi et al. (1993) lens of psychological complexity to help me analyze how scouts' mindset interprets the mindset of MLB prospects. In addition, flow theory integrated with talent development (Csikszentmihalyi et al., 1993) provides a framework for diagnosing the environmental and psychological elements of peak

performers in baseball. In the next section, I discuss the components and relevance of Ericsson's theory of deliberate practice in the development of performance expertise.

Ericsson: Deliberate Practice and Performance Expertise

Ericsson's theoretical framework explained the development of performance expertise leveraged by the efficacy of prolonged deliberate practice, and he grounded his explanation in an empirical stance of environmental determinism. In plain talk, Ericsson described what it takes to become an expert performer, and he pivoted this process on two components: (1) deliberate practice; and, (2) the 10-year rule.

Ericsson et al. (2007, June) pointed to an over-reliance on anecdote and intuition as research limitations in the study of expert performance, and a key question in Ericsson's quest to define expert performance included determining if "some healthy individuals have an innate advantage" (p. 6). Although Howe and colleagues' (1998) review enlarged the radius of the nature v. nurture dialogue, Ericsson (1998) stated their reexamination "leads us away from the original theoretical question: Can the lack of innate immutable talent preclude healthy, normal individuals from attaining expert performance?" (p. 413). As a remedy, Ericsson et al. (2007, June) defined expert performance as "reproducibly superior performance," capable of empirical verification "by designing standardized representative tasks, which can capture this performance" (p. 9). Specifically, Ericsson and colleagues (2007, June) introduced a science of expert performance capable of achieving three evidentiary criteria: (1) identification of observable, measurable performance behaviors; (2) reliable test-retest of performance behaviors under controlled conditions; and, (3) the demonstration of reproducibly superior performances when compared to "motivated control groups" (p. 14).

Ericsson's (2007) core thesis stated "experts continually engage in *deliberate practice*" (p. 12), and, similar to Bloom (1985), Ericsson et al. (2009) mapped the development of deliberate practice as a progression of three stages: (1) introduction to a skill, its fundamentals and feedback cues; (2) continued practice, skill acquisition, and skill automation; and, for those "who are committed to attaining expert levels of performance," (p. 204) (3) constructive feedback and adaptive training challenges designed to improve performance. In sum, Ericsson et al. (1993; 2007, June; 2009) defined talent development leading to expert performance as a process of deliberate practice (DP), progressing over a minimum period of 10,000 hours and/or 10 years or more.

Ericsson (1998) separated normal talent development (e.g. skill acquisition) from the development (e.g. deliberate practice) of expert performance. In addition, Ericsson et al. (1993; 2007, June) also differentiated deliberate practice from routine repetition of pre-existing skills and described deliberate practice as premeditated, highly structured training designed to elevate performance, while conducted at the edge of one's competencies with no guarantee of enjoyment and the initial likelihood of frequent failure.

With similarity to Csikszentmihalyi, Ericsson et al. (1993) claimed "individuals are motivated to practice because practice improves performance" (p. 368). To this end, Ericsson et al. (1993) outlined three environmental and human restraints that require optimization for the products of deliberate practice to surface. Namely, deliberate practice that produces performance expertise is reconciled by navigating resource, motivational, and effort restraints (Ericsson et al., 1993). Resource restraints envelope time, energy, training opportunities, facilities, and teachers/coaches; whereas, and in contrast to Csikszentmihalyi et al. (1993), motivational restraints tap the personal will of the individual because deliberate practice is not always

enjoyable or instantly rewarded (Ericsson et al., 1993). Effort restraints speak to the negative byproducts of over-focused deliberate practice, specifically injury and/or burnout avoidance (Ericsson et al., 1993). These adaptive challenges also bear resemblance to the environmental interactions identified by Galton (1892/1914) – "zeal, and power of work" (p. 41) – and hypothesized by Rickey (1965) – "aptitudes, attitudes, and effort" (p. 85).

Compared to "everyday skill acquisition" (p. 413), Ericsson (1998) highlighted three developmental effects of deliberate practice that accelerate expert performance. Specifically, deliberate practice generates the development of: (1) "desirable physiological adaptations" (Ericsson, 1998, p. 413); (2) "predictive perceptual cues" (p. 414), and (3) an enhanced mental ability to "plan, control, and monitor their performance through continued improvements" (p. 414). In turn, Ericsson and colleagues' (2009) claimed the "distinctive characteristics of exceptional performers are the result of adaptations to intense practice activities that selectively activate dormant genes that are contained within all healthy individuals' DNA" (p. 199).

Deeper still, Ericsson (2007) identified "the arrested development associated with automaticity" (p. 17) as the critical boundary blocking the limits of talent development leading to expert performance, and stated (Ericsson et al., 2009) explanations of elite performance are incomplete in the absence of accounting for "how elite performers *develop* the complex cognitive mechanisms and improved physiological adaptations that mediate superior performance" (p. 204). Ericsson et al. (2009) described automaticity as a "stable plateau of performance" (p. 200), and this definition approximated Galton's (1914) hereditarily applied "law of deviation from an average" (p. vi). Specifically, Galton contended performance ceilings are byproducts of genetic lineage and incapable of breakthrough beyond. In opposition to Galton's theoretical stance, Ericsson and colleagues (2009) stated, "expert performers counteract

automaticity by developing increasingly complex mental representations to attain higher levels of control of their performance" (p. 200). In turn, Ericsson et al. (2009) identified the combination of deliberate practice mixed with "challenges that demand concentration and effort" (p. 213) as the solvent for unlocking automated performance.

Similar to Csikszentmihalyi et al. (1993), Ericsson (1998) identified "motivational factors" as the key element to understanding talent development leading to expert performance "because of the complex cognitive structure that experts acquire through extended, deliberate practice" (p. 414). In sum, the process of deliberate practice develops "refined mental representations," "advanced preparation and anticipation," and superior speed resulting from "acquired cognitive representations" in the long-term pursuit of performance expertise (Ericsson et al., 2009, p. 203).

Although documented effects of deliberate practice are positive and plentiful, Ericsson and Charness (1995, September) skeptically questioned the possibility of an answer to the nature-nurture debate via logical reasoning; rather, they appealed for longitudinal measurement and observation of deliberate practice and its effects on domain-specific performance. However, Weiss and Shanteau's review (2014) contended that Ericsson's definition of "expertise" is laden with limitations, specifically: (a) it is ambiguous (e.g. how much training and skill is required to become an expert?); (b) it overconfidently claims origins endemic to personal will; and, (c) its absolutism creates a dichotomy of two types of people, experts and non-experts. The impediments above are grounded in the authors' (Weiss & Shanteau, 2014) apprehensions about the evolving direction of expert performance research, namely: (a) the operational definition of expertise negates both/and thinking; (b) the disciplines of study are relegated to domains most

easily measured; (c) the investigations focus on a limited scope of skills; and, (d) the results and conclusions reflect incomplete data interpretations.

Talent identification and the psychological attributes required to develop baseball performance expertise are not unequivocally or theoretically understood. To this end, Ericsson et al.' (1993) theory of deliberate practice presents a framework for analyzing how professional baseball scouts make meaning of prospects' training and performance improvements (or lack thereof). In a distant way, Ericsson et al.' (1993) theoretical paradigm, designed to overcome weaknesses through prolonged and deliberate practice, also aligns with Rickey's farm system model and "principle of quality out of quantity" (as cited in Kerrane, 1999, p. 24). In turn, minor league farm systems' concept of step-wise competition of increasing difficulty also align with Ericsson et al.' (1993) three stage progression of deliberate practice. In sum, I selected Ericsson et al.' (1993) theory of deliberate practice and performance expertise as a lens to interpret professional baseball scouts' judgment when forecasting performance potential.

Schon (1983): Knowing and Reflecting in Action

Schon's publication (1983), *The Reflective Practitioner*, critically assessed the limitations of technical rationality and illuminated the routine existence of reflective practice among proficient practitioners. For Schon (1983), the ingredients of technical rationality, or "professional knowledge," are demonstrated through "instrumental problem solving made rigorous by the application of scientific theory and technique" (p. 21). However, Schon (1983) established that competent practitioners do not solitarily lean on the premises of science and technology as the keys to their knowledge, actions, and problem solving. Rather, Schon's (1983) study and resultant theory championed the concept of expert "know-how" as a form of reflective

knowledge intelligently revealed in the midst of action and manifested as "intuitive performance."

Schon (1983) exposed the generally accepted tendency to avoid deeper inquiry into the "intellectual rigor in professional practice" (p. viii). He challenged the positivist epistemological belief that "craft and artistry had no place in rigorous practical knowledge" (Schon, 1983, p. 34). In effect, he affirmed a both-and perspective for knowledge creation and "emphasized the importance for professionals of tacit/experiential as well as theoretical knowledge" (Mintz, 2016, September, p. 277).

Schon (1983) hypothesized that proficient practitioners understand more than they can clearly verbalize. That is, everyday "spontaneous, intuitive performance" (Schon, 1983, p. 49), while often undefined or unexplainable, reflects a form of knowledge and recognition of phenomena that are "ordinarily tacit, implicit in our patterns of action and in our feel for the stuff with which we are dealing" (p. 49). Hebert (2015) described these behaviors as a form of situational intellect "based on an intuitive feeling that has been cultivated through experience" (p. 364). Schon (1983) further described knowing-in-action as a form of "gut instinct": "In his [competent practitioner] day-to-day practice he makes innumerable judgments of quality for which he cannot state adequate criteria, and he displays skills for which he cannot state the rules or procedures" (pp. 49-50).

Technical rules and knowing-in-action occupy opposite poles in Schon's (1983) theory of reflective practice, but when uncertainty or surprise surfaces in the gap separating these factors reflection-in-action is triggered. Schon (1983) identified reflection-in-action as "central to the 'art' by which practitioners sometimes deal well with situations of uncertainty, instability, uniqueness and value conflicts" (p. 50). More specifically, Schon (1983) outlined three

distinctive characteristics and principles of knowing-in-action: (1) spontaneous movement, signal recognition, and decision-making often occur without preplanning or forethought; (2) intimate awareness of how practitioners learn these responses is frequently unknown; and, (3) conscious understanding of the deeper knowledge behind these actions is often absent.

While Schon (1983) acknowledged the equivocation the term "practice" engenders in scholarly settings, he defined a practitioner as "a specialist who encounters certain types of situations again and again" (p. 60). In turn, he explained that although frequent repetitive practice can produce spontaneous knowing-in-practice, this level of routine also establishes a potential downside effect: "the practitioner may miss important opportunities to think about what he is doing" (Schon, 1983, p. 61).

Experimentation is inherent to the process of reflection-in-action when routines face uncertainty or surprise. However, Schon (1983) stressed "experiment in practice" is an amalgam of "several different kinds of experiment" and unfolds much differently than controlled experimentation or empirical observation (pp. 144-145). Experimentation for practitioners is most frequently operational when posing the question "what if?" (Schon, 1983, p. 145). Within this process practitioners situationally determine the relevance and application of "the three levels of experiment – exploration, move testing, and hypothesis testing" (pp. 152-153) with a first order goal of "changing the situation" (p. 153). Specifically, the reflective practitioner "plays his game in relation to a moving target, changing the phenomena as he experiments" in pursuit of a desirable modification (Schon, 1983, p. 153). For Schon (1983), this level of "knowhow is in the action" (p. 50), and proficient practitioners "turn thought back on the action" (p. 50) and create "a new theory of the unique case" (p. 68) independent of "established theory and technique" (p. 68).

The consequential findings of Schon's research (1983) include a dissection of the "distinctive structure" of reflection-in-action (i.e. reflection in the thick of action) and reflection-on-action (i.e. after action reflection). Schon (1983) illustrated the processes of reflection-in-action and reflection-on-action through case analyses and characterized these responses as frequently occurring "without conscious articulation" (p. 139).

Closely aligned with my study, one of Schon's (1983) case examples featured a Major League pitcher "finding his groove" as context for answering the question: "What is 'learning to adjust once you're out there'?" (p. 55). Both Schon's (1983) question and response in this instance emphasized the efficacy of adaptation: "Presumably it involves noticing how you have been working, and on the basis of these thoughts and observations, changing the way you have been doing it" (p. 55). Schon (1983) described this interactive reflection as a focused process targeted on three stages of action: "the outcomes of action, the action itself, and the intuitive knowing implicit in the action" (p. 56). Explained differently, Johnston and Fells (2017) described the formation of adaptive change through reflection in this way:

As a practitioner engages in an activity, there may come a moment where the practitioner's understanding of the activity is challenged – 'this isn't working'. This surprise (in Schon's terminology) causes the practitioner to draw upon prior knowledge and experience to 'see' a new solution that overcomes the challenge and so enables the activity to continue (p. 69).

Schon (1983) also identified a reflective practitioner as a researcher who "constructs a new theory of the unique case" (p. 68), and this form of research unfolds through a process of "reframing." Reframing sets the boundaries of decision-making and reinforces perpetual reflective dialogue while engaging the practitioner's "repertoire of examples, images, understandings, and actions" (p. 138). Schon (1983) submitted that the whole of this experiential

mental catalogue (i.e. repertoire) functions as a comparative lens (i.e. "precedent") "for understanding and action" (p. 138). In sum, Schon (1983) summarized the process of how professionals think in action in this way:

It is our capacity to see unfamiliar situations as familiar ones, and to do in the former as we have done in the latter, that enables us to bring our past experiences to bear on the unique case. It is our capacity to *see-as* and *do-as* that allows us to have a feel for the problems that do not fit existing rules. (p. 140)

The practitioner's repertoire then serves as a guide for making meaning of the unique and "Seeing *this* situation as *that* one" (p. 139) while potentially influencing decision-making and/or action to "also do in *this* situation as in *that* one" (p. 139).

Schon (1983) noted that the stressors associated with managing atypical situations and/or situations that necessitate rapid response(s) tend to suppress calculated analysis and lead to discussions of "instinct." Instinct ("feeling for phenomena") and skill ("for action") comprise one aspect of Schon's (1983) two-part definition of "art," or in his terminology, knowing-inaction (p. 241). The second element represents "a manager's reflection, in a context of action, on phenomena which he perceives as incongruent with his intuitive understandings" (Schon, 1983, p. 241). Irrespective of stimulus, Schon (1983) depicted reflection-in-action as consisting of "on-the-spot surfacing, criticizing, restructuring, and testing of intuitive understanding of experienced phenomena" (pp. 241-242). He stated these in the moment adaptive responses tend to be manifested as a "reflective conversation with the situation" (Schon, 1983, pp. 241-242). Paradoxically, however, managers inadequately chronicle their reflection-in-action, and as a result are unable to instruct others in their method of reflection. Additionally, Schon (1983) emphasized the influence of the "learning system" of "organizational life" for managers – as

both represent a source of knowledge and an environment that "may promote or inhibit reflection-in-action" (p. 242).

While Schon (1983) addressed organizational forces and their effects on reflective managerial leadership, he also described the "variety of virtual worlds on which all professions are dependent" (p. 162). He defined these virtual worlds as situational experiments that allow practitioners to "suspend or control some of the everyday impediments to rigorous reflection-inaction" (Schon, 1983, p. 162). Specifically, a practitioner's capacity to develop and adapt virtual worlds is integral to generating experimental precision and artistic performance. This form of reflection pauses the pace of action, sets the stage for hypothesis testing, and "develops a capacity for accurate rehearsal" (Schon, 1983, p. 158) in a medium where "No move is irreversible" (p. 158). The end goal for implementing reflective virtual worlds is accurate transference to the practitioner's real world problem, pursuit, or dilemma. These methodologies can additionally take the form of "interpretative inquiry" (Schon, 1983, p. 160) and employ storytelling as a form of personal illustration, "slow down phenomena which would ordinarily be lost to reflection" (p. 161), and/or become a tool for strategic intervention. In sum, virtual worlds for Schon (1983) depict a "double sense of 'practice" (p. 162) that enlarges a practitioner's scope of reflection and magnifies his/her artistry.

A professional baseball scout's ability to "see," to reflect, and to employ "gut instinct" based on a repertoire of lived experiences represents empirically unexplored parameters with regard to talent identification and decision-making. In addition, prospects' adaptive instincts in action potentially reflect both a level of performance artistry and a battery of attributes valued by professional baseball scouts. As a result, I chose Schon's (1983) theory of reflective

practitioners as a framework for analyzing scouts' intuitive instincts, reflective knowledge, and gut feel for baseball talent identification and decision-making.

Bloom's characteristics and career stages of talent development, Csikszentmihalyi et al.' theory of psychological complexity within expert performers, Ericsson's theoretical framework for deliberate practice in the development of performance expertise, and Schon's theory of reflective practitioners create a platform for exploring the seen and unseen realities of baseball talent assessment and judgment. The dynamic nature of talent development, performance expertise, and reflection-in-action illuminate the motivational factors, psychological attributes, and intuitive artistry that I applied to my analysis and interpretation of talent identification and decision-making in professional baseball scouts. In the next chapter, I outlined and explained the methodology I conducted in my qualitative study.

CHAPTER THREE: METHODOLOGY

To explore the perceptual knowledge of professional baseball scouts' talent identification assessments and decision-making I selected a phenomenological methodology from the tradition of qualitative research (Bogdan & Taylor, 1975; Creswell, 1998; Moustakas, 1994; Taylor & Bogdan, 1998). This chapter describes the phenomenological approach to qualitative research methodology and my application to professional baseball scouts' firsthand experiences and perceptual knowledge. In the subsequent section, I explained the setting of my home office, my methodology for recruiting and interviewing professional baseball scouts, and I described how I will safeguard the confidentiality of my subjects, collect, and analyze my data. Last, I mapped my approach for ensuring optimal methodological reliability and validity.

Qualitative Research

I chose qualitative inquiry because the definition and discovery of talent are not clearly understood, and qualitative research places the investigator in the natural field of action as a data gathering agent to employ inductive analysis of participant views and interpret the meaning of lived experiences (Creswell, 1998). Talent is difficult to define, and the philosophical and empirical debates regarding its origin(s) are extensive. In turn, the ultimate goal of professional baseball scouts is accurate performance prediction, but the scientific method presupposes prediction is "based upon accurate *description* and *explanation*" (Regnier et al., 1993). As a result, the ambiguous nature of talent identification is not well-suited to a priori hypotheses; rather, qualitative research frequently begins with the question "how," and my study explores how professional baseball scouts describe and explain talent identification and prospect decision-making. To this end, I selected the qualitative research tradition as the most effective approach to understand scouts' knowledge and judgment of prospective professional baseball players, and

I based this strategy on the sensitivity of qualitative research to participant perceptions and perspectives.

Qualitative research produces rich descriptive data in a natural setting by staying on the leading edge of participant narratives, behaviors, and responses (Bogdan & Taylor, 1975; Cresswell, 1998; Taylor & Bogdan, 1998). Professional scouts are employed to conduct observational discovery in the field and interpret the attributes and potential of baseball prospects. Comparatively, qualitative researchers capture the voice of participants to conduct inductive reasoning and interpretative analysis (Bogdan & Taylor, 1975; Creswell, 1998; Regnier et al., 1993; Taylor & Bogdan, 1998). Additionally, the transparency and rigors of qualitative research fully disclose any potential researcher biases and/or distortions to safeguard validity and ensure data is holistically presented and analyzed from all vantages (Bogdan & Taylor, 1975; Taylor & Bogdan, 1998).

Sensitive to participants' frame of reference, qualitative researchers do not enter the field with a priori hypotheses; instead, they embrace a flexible design (Taylor & Bogdan, 1998).

Baseball scouting, like qualitative research, is a craft, and the available research suggests expert performers think and train differently than non-experts. Analogous to this concept, Taylor and Bogdan (1998) characterized qualitative researchers as focused and "concerned with how people think and act in their daily lives" (p. 8).

Critics of qualitative research often question the generalizability of results, but qualitative research seeks to uncover emergent truths and make meaning that is often "lost in other research approaches" (Bogdan & Taylor, 1975, p. 5). Emergent truth rises from participant perspectives as qualitative investigators code data, identify themes, map processes, and develop hypotheses from focused discovery (Bogdan & Taylor, 1975; Creswell, 1998; Taylor & Bogdan, 1998). In

turn, qualitative research features two primary theoretical perspectives, and in the following section I explain the perspective I selected for my study, phenomenological methodology (Taylor & Bogdan, 1998).

Phenomenology

This investigation seeks to more clearly understand how professional scouts define player attributes and make decisions about Major League prospects. Public assumptions about scouts (and/or coaches) presume their knowledge is instinctive and typically list judgment as a key attribute in successful job performance (Christensen, 2009; Jones et al., 2003; Nash & Collins, 2006). Descriptively, phenomenological research embraces the study of lived experience (phenomenon) through participants' first-person descriptions of cognitions (Cresswell, 1998), and this philosophical stance maintains "knowledge based on intuition and essence precedes empirical knowledge" (Moustakas, 1994, p. 26). Phenomenologically, and in the context of this study, when scouts visually assess baseball prospects, what scouts "see intuitively constitutes its meaning" (Moustakas, 1994, p. 70), and this intuition exposes the opportunity for gleaning deeper understanding about the essence of professional scouts' understanding of baseball talent identification.

Phenomenologists view human science and the creation of knowledge as a perpetually ascending ladder of experiential understanding (Moustakas, 1994). In brief, one's internal, conscious experience is secured by intentionality, and intentionality of consciousness describes how one perceives an object or experience (Moustakas, 1994). Specifically, perception is an intentional action, and "intentionality" is comprised of the two-part dynamic of what one perceives (noema) and how one makes meaning (noesis) of their perceptual experience (Moustakas, 1994). That is, the noema represents the textural view of what our mind's eye

perceives, and it is subject to the variances of vantage points, such as timing, prior experiences, aspirations, and angle of view (Moustakas, 1994). In turn, noesis denotes one's structural interpretation of perception, and the dual elements of this internal dynamic are mutually dependent (Moustakas, 1994).

Phenomenological research stresses the importance of intentionality and examines the implicit meaning or "essence" of lived experiences (Cresswell, 1998). Lived experiences are typically mined from statements and responses collected from long interviews, and phenomenological researchers group these statements in thematic bundles to reflectively search for meaning in participants' textural descriptions (what they experienced) and structural descriptions (how they interpreted their experience). Moustakas (1994) defined the goal of phenomenological research as the discovery of experiential meaning making, and he stated this is accomplished when participants descriptively disclose their experiences and from this data researchers extract meaning, described as "the essences or structures of the experience" (p. 13).

The philosophical foundations of phenomenological research are grounded in four principles, namely: (1) the search for wisdom; (2) the elimination of prejudgments; (3) the intentionality of consciousness; and, (4) the conviction that reality is a product of consciousness (Cresswell, 1998). In addition, phenomenological research pivots on four operational truths: (1) the centrality of epoche (or, bracketing); (2) the efficacy of researcher questions that fully explore participants' experiences; (3) the "reduction" of data analysis; and, (4) achieving understanding ("essence") of the participants' experiences (Cresswell, 1998). The synthesis of these principles and procedures begins with the disposal of researcher prejudgments, accomplished by bracketing ("epoche"), or the dismissal of one's preconceived notions, biases, and fears, followed by the transparent trusting of intuition and imagination to interpret the

essence of participants' experiences (Cresswell, 1998; Moustakas, 1994). The essence of these experiences is made clear through reduction, described as "the analysis of specific statements and themes, and a search for all possible meanings" (Cresswell, 1998, p. 52), or, as Moustakas (1994) described, "the essences of experience are the invariant meanings" (p. 51). In the following section I detail the specific plans of my research design.

Research Plan Details

Setting

The empirical base of my study is the phenomenological analysis of in-depth, in-person interviews with thirteen veteran professional scouts currently or formerly employed by Major League Baseball franchises. Interviews began in March, 2016 and concluded in July, 2016. I interviewed participants at ball parks, in hotel rooms, and at restaurants in the states of Florida, Maryland, North Carolina, Pennsylvania, South Carolina, Tennessee, and Virginia.

Recruitment and Selection of Participants

The 13 participants in this study are males currently or formerly employed by MLB organizations, and I assembled my prospect list based on two criteria. One, participants had to have at least six years of experience as an MLB area scout. Two, participants had to have a minimum of 18 years of combined scouting experience at the professional and/or NCAA Division I baseball levels.

Taste for true talent is potentially the byproduct of extended years of high-level baseball experiences, and, as Kerrane (1999) detailed, the development of intuition from "well-stocked memory banks" (p. 324). I selected the range of minimum years and level(s) of experience because of its alignment with Bloom (1985) and Ericsson et al.' (1993) frameworks for the

duration and intensity of talent development, as well as the potential influence of extensive high-level baseball experiences on scouts' decision-making tendencies (Kahneman, 2011; Lewis, 2004; Thaler & Sunstein, 2003). Phenomenologically, if what professional baseball scouts "see constitutes its meaning" (Moustakas, 1994, p. 70), then the collection of scouts' narrative data is potentially enriched when the range and diversity of participants' prior experiences are enlarged.

My participants consisted of thirteen men, 12 Caucasian and one African-American, who are currently employed as scouts by Major League organizations. These men ranged in age from 51-68 years; their average length of service as scouts with Major League franchises exceeded 28 years; and the length of their professional scouting tenures spanned from six to 43 years of service. To further protect the anonymity of my participants, I refrained from creating a tabular description that listed their pseudonyms, ages, scouting roles, and years of service. MLB organizations routinely employ only one area scout per region. The states where I interviewed my participants are clearly portrayed, and a columnar depiction of this study's participants likely compromises their identities through the context and content of their narrative stories and statements portrayed in my data chapter.

My participants represent a stellar group of veteran professional scouts who amassed in excess of 250 years combined service with Major League organizations. The lifework accomplishments of my 13 scout participants included the following professional benchmarks: Five advanced to become scouting cross-checkers; two participants progressed in their careers to assume the role of scouting director on three occasions; one served as an international scout; three became special assistants to the General Manager; two ascended to the position of Major League advance scout; four spent the entirety of their professional scouting careers with the same MLB organization; seven conducted minor league coverage as professional scouts; two

previously managed minor league baseball teams; seven played professional baseball; six previously coached college baseball; one advanced to become a Major League player; and, two participants are members of scouting Halls of Fame.

I am a former collegiate baseball coaching veteran (Mid-Atlantic Region); I previously met 11 of the 13 participants in my former coaching roles; and, I coached with and/or against three of my 13 participants. My professional and relational communications with all prospective participants virtually ceased when I simultaneously departed from coaching and the Mid-Atlantic Region in 2000. As a result of my lengthy coaching tenure, I am well-versed in the language of baseball, fluent in the terminology of baseball scouting, and as one who previously signed and developed professional baseball draft selections I enjoy a measure of respect and rapport with professional scouts in the areas of talent identification and development.

In February 2016, I collected mobile phone numbers and e-mail addresses for prospective participants from three of my former players who served as Division I head baseball coaches.

These coaches served as resources for securing potential scout participants' contact information.

It is customary for area scouts and Division I baseball coaches within that area to share contact information.

I sent twenty-nine prospective participants a personal electronic letter with a summary description of my study and an invitation to participate. When I received an affirmative response, I telephoned or emailed each prospect and informed them that the purpose of my study is to understand how professional baseball scouts define prospect attributes and make player selections. I scheduled a date, time, and location to conduct an in-person interview with each participant. I discussed the necessary elements of consent, confidentiality, risks, and benefits in-person with each participant, received their signatory approval, and provided them with a copy of

the consent form. Participant interviews averaged nearly forty-two minutes and ranged from sixteen minutes to almost seventy-five minutes. No conflict of interest threats existed, and consent to interview, professional collegiality, and conversational freedom unfolded without episode.

Ethical Considerations and Confidentiality

Empathy is both intentional and integral for effective qualitative research (Moustakas, 1994). In turn, relating to participants' experiences hinges on the researcher's ability to build "an atmosphere of freedom, openness, and trust" (Moustakas, 1994, p. 39), and this climate of integrity is hedged by confidentiality (Cresswell, 1998). As a result, I transparently secured participant consent, fully informed each participant of my study's risks and benefits, and I ensured each participant's confidentiality. In the forthcoming sections I mapped the processes I employed for conducting an ethical, confidential study.

Protection of participants. I am no longer a certified NCAA baseball recruiter, my study did not ask questions about specific baseball prospects, and this separation assured professional baseball scout participants that no competition in scouting prospects or conflict of interest existed. I stressed to participants the freedom to withdraw from this study regardless of timing or reason prior to the publication of my study's results. In the event a participant chose to withdraw from the study, I assured each participant that all data collection regarding their participation will be deleted and shredded. I also informed participants of their freedom to abstain from answering any specific question during the interview.

Confidentiality is a critical foundation of this study, and I did not reveal participants' names, MLB organizations, and contact information. I ascribed pseudonyms for each participant

and coded their responses with this label. As the principle and sole investigator, the actual names of the participants and their assigned pseudonym are stored as objects in my memory.

I stored electronic data in two password protected computers that require double authentication, and I singularly maintained the collection and access to all collected data. I stored audio-taped and written narrative data in a locked filing drawer in my professional office, and, while traveling, the same data sources remained in my briefcase and on my person or securely locked in my hotel room safe. My faculty research advisor did not request access to my unidentifiable research data.

Risks and Benefits. I clearly and comprehensively informed all participants about the risks and benefits associated with their involvement in my study. I maintained anonymity, and risk of participant response recognition among MLB franchise employees and/or collegiate baseball coaches is remote.

The implicit benefit of involvement for participants is the self-satisfaction associated with chronicling one's talent assessment knowledge and playing a personal role in the advancement of the talent identification and decision-making literature specific to professional baseball. Scouts seldom have formal opportunities to explain their insights and judgment processes outside the cloistered realm of professional baseball, and scout participants demonstrated sincere interest in the opportunity to tell their story and explain their talent identification knowledge.

Consent. When securing consent, I addressed the specific procedures, risks, benefits, confidentiality, and voluntary participation with each participant in-person. Within this informational session, I explained the meaning and the details of the University of St. Thomas

IRB consent form (Appendix E) to determine each scout's full understanding and signatory approval.

Data Collection Methods

Qualitative research is distinctive for and typically occurs in natural settings (Bogdan & Taylor, 1975; Creswell, 1998; Taylor & Bogdan, 1998). Professional baseball scouts' stories represent the data collection of this investigation. Scouts annually evaluate hundreds of amateur baseball players, and this study endeavored to interpret the concepts that scouts employ in making assessments and forecasting potential. In turn, professional baseball scouts conduct their work and live large percentages of their lives "on the road," and I interviewed participants at a timing, site, and setting conveniently combined with their travel schedule. I personally funded my data collection travel, and participants did not receive any financial benefits for participation in this study.

Prior to traveling to conduct each interview, I electronically sent a reminder of our appointment, my mobile phone number, and a brief, general interview guide to each participant. The framework for the interview guide focused on two themes: (1) how scouts define, describe, and perceive baseball talent and attributes based upon their personal experiences and preferences; and, (2) scouts' fundamental philosophy for judging performance potential and making decisions to identify or eliminate Major League prospects. I designed the in-depth, inperson interviews to be reflexive in nature, and the purpose of the pre-interview communication served to help participants stimulate recollections and reflections in advance.

As principle investigator I personally conducted each interview. Upon arrival for each in-person interview, I re-introduced myself to each participant and allowed each participant to do

the same. This mutual re-introduction focused on mapping our career movements and professional roles over the past 15 years, and this conversational period established a setting of ease, comfort, and trust.

Prior to recording each interview, I re-stated the purpose of my study and reinforced the elements of confidentiality, the process of audio-taped responses, and answered any questions. I positioned the microphone in front of each respondent and announced when audio-taped responses began.

In the in-depth interviews I prompted scouts with open-ended questions to share their narrative beliefs about baseball talent identification and their understanding of how they assess talent, attributes, and judgments. I encouraged participants to tell their story of professional baseball scouting as it related to my research question.

Scout participants determined the path of each interview, and I shepherded their responses with the following list of thematic questions to ensure that connections pertaining to talent identification and decision-making were disclosed in the narratives: (1) how do you define baseball talent and attributes?; (2) how did you develop your scouting intuitions and instincts?; (3) how do you ensure what you see and interpret is accurate?; (4) how do you determine a prospect's value to your organization?; (5) how do you forecast a prospect's future performance?

The thematic questions served as a topical dashboard for exploring how scouts perceive baseball talent, attributes and decision-making. Christensen (2009) stated "telling tales and recounting anecdotes is a fundamental human way of giving meaning to experiences" (pp. 368-369), and the form of my interview plan concentrated on drawing out scouts' narrative

recollections that are fundamental to their knowledge of talent identification and forecasting performance expertise.

Successfully drawing out scouts' narratives and insights required that I fully engage as an active listener (Moustakas, 1994). In addition, I recorded descriptive notes during each interview to capture body language and comparative, anecdotal, and/or metaphorical expressions.

Christensen (2009) stated "body language punctuates verbal language's deficiency in describing the expert knowledge coaches have" (p. 371), and I recorded these behaviors and language forms to gain deeper understanding into scouts' talent identification and decision-making insights.

I personally recorded and transcribed the audio text of each in-depth interview session. While tedious and lengthy compared to employing a transcription service, I preferred to personally transcribe interviews because it reinforces my intimate awareness with and reflections about participants' narrative responses and readily triggered reflective notes for later theme development (Creswell, 1998). Upon completion of every transcription, each participant received an electronic copy to verify the accuracy of his narrative account. In turn, participants had the opportunity to make corrections, and, in an effort to preserve anonymity, modify or delete any specific responses. In the subsequent section I explained my data analysis methodology.

Data Analysis

Upon verifying the accuracy of all transcriptions, I analyzed in-depth interviews employing Moustakas' (1994) modification of the Van Kaam method for phenomenological research. In my data analysis, I followed Moustakas (1994) seven-stage, stepwise process

culminating in "a composite description of the meanings and essences" (Moustakas, 1994, p. 121) of how professional baseball scouts define player attributes and make decisions.

In step one, I re-read participants' narratives, my reflective and observational notes and created codes for the statements relevant to my research question. Moustakas (1994) defines this "preliminary grouping" as "horizonalization," and in step two he provides two screening questions to ensure the data extracted (e.g. statements) "are the invariant constituents of the experience" (pp. 120-121). In the subsequent step, I assembled the coded statements in "clustered" bundles that reflect "the core themes" scouts expressed when describing their perspectives regarding baseball talent identification and judgment (Moustakas, 1994, p. 121). Step four involved the validation and conclusive identification of scouts' meaningful expressions as filtered through two screening questions. During this step, I re-evaluated themes and expressions for completeness and relevance. I consistently updated my dissertation chair, and, while maintaining participant confidentiality, solicited his feedback, insights, and interpretive counsel regarding my thematic interpretation of scouts' statements. The culmination of this initial four-step data identification, reduction, and labeling process delivered clear thematic expressions of participants' core experiences (Moustakas, 1994).

Incorporating transcribed expressions, steps five and six resulted in the textural and structural descriptions of "how" scouts define and experience baseball talent assessment and decision-making (Moustakas, 1994). Step seven followed with a "Textural-Structural Description of the meanings and essences" (Moustakas, 1994, p. 121) of baseball talent assessment and decision-making for each participant, and I developed a conceptual map based on the comparative differences, similarities, interdependencies, and potential cause-effect relationships.

Validity and Reliability in Qualitative Research

Phenomenological investigations are not intended to yield broad generalizations, but rather "to determine what an experience means for the persons who had the experience" (Moustakas, 1994, p. 13). This determination pivots on methodological reliability and validity, and a principle focus of my data analysis was the establishment of sound protocols for data synthesis and reduction to ensure strength of internal validity (Creswell, 1998; Moustakas, 1994). In the subsequent section I explain the processes I employed for ensuring internal validity, and I disclose researcher reliability considerations.

Internal Validity. Qualitative research is not initiated with the development of a priori hypotheses in search of cause-effect relationships. Rather, comparative differences, similarities, interdependencies, and/or cause-effect relationships often unfold in the process of qualitative data analysis and interpretation (Taylor & Bogdan, 1998). As a result, methodological protocols that ensure high quality data synthesis are critical for conveying internal validity in qualitative research.

My study employed several simple structures to foster strong internal validity. First, I conducted my study within the borders of a limited scope. Specifically, I designed this investigation to explore how thirteen veteran professional baseball scouts define player attributes and make decisions to identify or eliminate Major League prospects. To this end, my results can only directly apply to the context of these phenomena within the confines of my participants. In addition, I transparently disclosed my prior experiences and relationships. No unanticipated threats to internal validity surfaced in the process of data collection.

Second, my prior experiences served as a strength to validity regarding access and data analysis. My tenure in baseball provided me access to a sector of society that operates nearly invisible to public awareness and my background as an applied sport psychologist served to broaden my cognitions. More importantly, my participants' statements directed the thematic elements of their core perspectives, and my stepwise data analysis employed screening filters that promoted reflective exploration of alternative connections and explanations. In turn, my results include participant statements conveyed in a fashion that engage the reader as a cointerpreter.

Third, although my research question and setting are unique, prior empirical investigations and theoretical frameworks regarding talent identification, talent development, and performance expertise potentially create an opportunity for cross verification of results through triangulation (Creswell, 1998). As a result, data triangulation may prove instrumental in building a conceptual model incorporating the talents and attributes fundamental to the development of baseball expertise and increasing an organization's yield of Major League players.

Generalizability. Qualitative research limits generalizations by the very nature of participant selection and naturalistic design (Taylor & Bogdan, 1998). My phenomenological study is no exception. However, Taylor and Bogdan (1998) stated the "goal of qualitative research is to examine how things look from different vantage points" (p. 9), and the talent identification and judgment components of my research question hold limited transferability to other performance disciplines and settings.

My interest in talent identification and decision-making deepened as I worked with search consultants to identify prospective presidents, vice presidents, and head coaches over the past decade. This study investigated the "hiring process" (i.e., amateur draft selections) of

prospective baseball players and the methodology professional baseball scouts employ to project performance success at the next level of play. This study uncovered meaningful insights that are marginally applicable to forecasting performance expertise across other contexts and settings.

Researcher Bias. My prior professional and scholarly experiences positively sway my biases toward the efficacy of talent development, the synergistic impact of psychological attributes and physical ability, and the wonder of unrealized, undiscovered, and wasted performance potential. However, while these personal experiences predominate, like professional baseball scouts, I misjudged talent on many occasions throughout my professional career. In turn, my deeper inclination is found within a sincere personal pursuit to explore scouts' "tastes" for talent and player selection while holistically exercising an analytical perspective from all vantages.

My methodology explained my case for employing the qualitative research tradition through phenomenological methods, and I detailed my research process. My research plan described the setting, recruitment and selection of participants, ethical considerations and confidentiality, data collection methods, data analysis, and validity and reliability.

CHAPTER FOUR: TALENT DEFINITIONS AND PROSPECT JUDGMENTS

The goal of professional baseball scouting is to make good talent identification decisions that increase an organization's yield of Major League players. Skillful judgment in talent identification influences talent development and the pursuit and realization of performance expertise. My personal scouting experiences inspired me to explore the insights of veteran professional baseball scouts and to learn how their "taste for talent," visual talent recognition, and attributional definitions advise and inform their prospect decisions. Professional scouts conduct field observations and evaluations of prospective players. I interviewed 13 veteran baseball scouts to learn the essence of what scouts see, examine, and judge when they identify and eliminate prospective players.

To isolate and examine veteran professional scouts' processes for talent identification assessments and decisions, I conducted in-person, in-depth, reflexive interviews. Through this progression I gained a sense for how scouts' dispositions channel their appraisal of baseball tools, physicality, and competitive movements. In addition, scouts disclosed their interpretive research methods, how they detect, value, and define psychological makeup traits, and, in the end, how they project expert performers and resolve their draft choices.

In this chapter, I depict how my participants' narrative expressions revealed textural as well as structural descriptions regarding how scouts define and identify prospect attributes and make player decisions. I employed Moustakas' (1994) modification of the Van Kaam method for phenomenological research, and the thematic expressions of my participants' core experiences are extensively presented here to engage the reader as a co-interpreter.

Based on my participants' core experiences, I introduce five the key themes emerging from the data. These themes are: (1) scout dispositions; (2) field observation; (3) prospect research; (4) expert performance forecasts; and, (5) player selection. Within the context of this thematic framework, I map the components of visible talent recognition, and I outline the traits of psychological makeup professional baseball scouts identify in prospects. In the end, I identify how scouts define physical and psychological attributes, forecast performance expertise, and make player judgments.

Scout Dispositions

The first theme emerging in my study is scout dispositions. The launching point for understanding baseball talent identification begins with descriptions of these prevailing dispositions. In brief, amateur players train and compete while professional baseball scouts observe, compare, and project players' tendencies. To this end, Manny summarized the general function of a professional baseball scout in this way:

Scouting is all about observation. You're sitting there. You're observing. You're not an active participant. You're not someone with a uniform on. You're not throwing BP. You're not coaching 'em. You're not on the field. You're just back there watching.

However, participant narratives also revealed two distinct classifications of scouting dispositions: (1) *open consideration*; and (2) *narrow mindset*. Sam metaphorically framed these branched mindsets by sharing the attitudinal perspective he learned when trained by his first scouting cross-checker:

You take a funnel. You know how a funnel goes out? You look through that hole. Everybody's a prospect, everybody in that funnel is a prospect. So everybody on the field is a prospect until they show you that they're not. What some scouts do is they turn the funnel the other way, and they look at that one player at shortstop. That's the only guy they're looking at, nobody else they're worried about. So they miss the other guy.

Deeper still, Sam practiced this frame of mind through the application of three questions: "You have to go 'all these guys are good, but who's special? Who's gonna' play above their tools?

And who's on a decline?" Joe characterized a similar perspective as "an open mind because every kid changes," and his self-reflections revealed a comparable sequence of questions:

Now we all get into the habits of 'that guy can't do that.' It's every year you've got to adjust your sights and say 'okay, I've gotta' give this kid another shot." Is he gotten' better? Has he made himself into something where, 'you know what, I can send him out and he's going to be a good part of the organization and he's going to get to the Big Leagues.'

Similar to Sam, Joe's mindset reflected a personal, experiential teaching point about cumulative training: "I kept improving and every kid does that." Joe also highlighted the possible talent identification oversights that can occur when scouts' over-rely on visual evaluation and adopt a *narrow mindset*: "You know that's why you can't take what you see on the field for everything. Because we don't know what they're gonna be seven years down the road."

The reality that nearly all players require minor league development and most never advance to the Major Leagues potentially influences scouts' talent identification conclusions, and Joe described talent forecasting as a reciprocal relationship between sight and experiential instinct: "So you're seeing it with your eyes, and your gut's saying 'oh let's see what this kid's gonna' be like in a couple years'." In addition, Joe pointed to a third inherent reality in professional baseball talent identification – the prevalence of differing, individual perceptions:

So, you know your question 'taste for talent' is a hell of a question because there's different tastes for everybody. I'll have a guy on my list this year that 27 other clubs won't, but they'll have a guy on their list that I won't have on my list. So we're all different, we're all seeing something different.

Jeb illustrated perceptive differences through a scouting lesson learned when he evaluated Dustin Pedroia, a prospect who later developed into a four-time Major League All-Star

(2008-2010, 2013), American League Most Valuable Player (2008) and Rookie of the Year (2007):

The tools weren't obvious because he didn't run very well. He didn't throw very well. He had a long swing, but he always seemed to get the barrel to the ball, come up with a key hit in a key situation. But you kind of overlooked those things because you had a 5'9", kind of chunky kid who could play the game.

Reflecting 12 years back, Jeb confessed: "Once you started to peel back the layers on Pedroia there was a lot more underneath that kid than just his on field grit that was obvious." At 5'9", 175 pounds Pedroia represented an evaluation dilemma as an undersized player who, despite his stature, visibly displayed valued makeup traits.

You saw that kid and the way he went about his business over a weekend series, you knew he had toughness. You knew he had grit by the way he went about his pre-game, by the way he went about his on-game preparation. Everything told you this kid loves the game.

Dissecting the influence of nature's impact on talent identification perspectives, Jermaine depicted prospect height as a preferential focal point and a representative sixth physical tool in the minds of some scouts:

The size, that's another – you're looking at five tools, the sixth tool is 'how big is this guy?' He's big, you can project him. Little guys gotta do it all the time; big guys only gotta do it some of the time.

Six participants highlighted the influence of heritable size in talent identification, and Ted characterized genetic height as a primal element and evaluative lens across several members of the scouting community:

...but I know there's cross-checkers that come in, you're an amateur scout, and they're gonna come in – as soon as they see this guy's a 6' and under guy they're probably not even gonna watch. They're just gonna eliminate because some of 'em had, have always got to the point where they don't want to sign anybody unless he's big – especially with pitchers.

More intensely, Ted reported: "I'm just saying that they're bypassing guys on size, especially pitchers – that's a fact." Jermaine also shared personal bewilderment with height infatuation – "You look down a roster and right handers 6'4", 6'5", 6'3", 6'6". Very rarely do you see a 6', 6'1" right hander – why? That puzzles me." Illustrating his case, Jermaine pointed to the valued makeup traits exemplified in previous undersized Major League All-Stars and questioned the relevancy of height:

Bob Gibson was like 6'1" – he wasn't a big dude. But they were fierce competitors. They were fierce competitors. They had that internal instinct to win. They had ability. They were undersized. Why can't that guy be a guy today?

Jermaine challenged the height-centric focus of narrow mindsets and stated: "We go see guys in these workouts that are 5'10", 5'11" that are really good players. I think we overlook 'em."

These narratives described genetic height as a fulcrum that can turn the scope of the funnel or lens through which scouts observe and judge prospects. However, Jermaine declared that undersized prospects actually "can still get to the promised land," and Ted theorized that undersized Major League stars often serve as an antidote for height-driven, narrow mindsets:

The only thing that you can say about baseball is you got Altuve [shortest $-5^{\circ}6^{\circ}$ – current MLB player] – that's the only thing that stops us from being so overwhelmed with size – at least there's some guys, a Pedroia. So these guys are emerging in the Big Leagues and at least it kinda puts a damper. Wait a minute now, a small guy can do it too, in baseball.

While presumably both optimal and optional, evaluating height as a sixth tool draws a boundary between nature and nurture, or, more specifically, between tools and makeup.

Jermaine described this borderline in the perspective of an "either/or" struggle:

So much of it is genetics. We have nothing to do with it. It's what mom and dad gave us. Either you're 6'3" and 210 or you're 5'10" 160. If you're 5'10" and 160 you've gotta overcome a lot of things.

Jermaine shared this perspective as a byproduct of his personal experiences – both as a scout and as a former late round draft pick who became a MLB pitcher.

I would be considered the small right hander, the undersized right hander at 6'1" 190, 200 pounds. I'm an undersized guy. In today's world, I could be throwing 92, 93 – probably what I was... – alright, pretty good, but not a lot of projection. Now 6'3", 6'4", 210 pounds, we're gonna take that guy over this guy – because of body, genetics. Is that right or wrong? I hated it when I was a player.

For area scouts, time is an observational luxury in meager supply, and Mack measured the effects of *open consideration* and *narrow mindset* as a function of attentional frequency when he recounted his evaluation of undersized, 5'6", 160 pound, former MLB All-Star David Eckstein:

You have to see him four or five games to appreciate him. You know, 'ahhh, pretty good player.' Second game, 'pretty good little player.' Third game, 'what's this guy do?' Well, he makes all the plays. Arm is average. He's a 55 runner, a good situational hitter, and then by the time you're walkin' outta the ballpark you go, 'you know what? This guy's a pretty f___in' good little player.' Because he can execute.

Talent identification is influenced by quality and quantity of observational and research time, and Mack's example extolled the reflective benefits of repeated evaluations. Sam also described the limitations of observation and prospect research: "we ask the guy [area scout] from basically the middle of January to June 1st to know everything about his area he can possibly know. You can't do it. There's too much information." On the other hand, Joe depicted prospect evaluation as a developmental progression spanning, in many cases, five to seven years as scouts build observational histories with prospects across multiple seasons:

Every year is a new year, and some of those kids are now becoming freshmen and sophomores at junior colleges, or you've seen 'em now for five, six, seven years. So, sophomore, junior, senior in high school we've been following 'em for that long. Then all of a sudden they get to college and it's freshmen, sophomore, junior – so six years.

Joe summarized his observational disposition this way: "You know I think it really comes down to keeping an open mind on all of them."

Keeping an open mind can be challenged by quantifiable physical tools. For example, throwing velocity today is easily measured by the use of radar guns, and Ted stated, "As soon as they started passing out guns to everybody, everything came down to the velocities for everything." In this context, Jermaine compared optimal velocities over time and how measureable expectations experienced change and narrowed mindsets:

If you were a high school guy 20 years ago, when you were throwing 88 to 90 you were throwing hard. Now if you're 88 to 90 you're getting overlooked. You better be throwing 94, 96. We can see that, evaluate it.

Perspectives and expectations change in a competitive climate that values performance improvement, and Sam shared: "Sometimes, old scouts, old veteran scouts say 'this is the way it used to be.' Whoa, hold on. We can't judge him on what it used to be. We gotta' judge him on what it is now." Although quantifying performance measures for physical tools can provide scouts with feelings of talent identification confidence, Sam stipulated that open consideration of visual evaluations is a function of self-reflective questions, specifically the utility of repeatedly asking the question "why?": "The kids are the kids, and the players are the players, but we still have to continue to ask the question 'why?' If we continue to do that, then you can continue to see it, continue to notice it." For Jeb, asking the question "how?" precipitated visual analysis of baseball tools:

So, I've just kind of learned that there's a lot more than just picking it up, throwing it across the diamond, putting a good swing on a ball - it's how the body moves. How athletic is he? How much aptitude does he have?

The preeminence of a questioning mind, in Sam's words, begins with embracing failure as an inherent element in the never-ending development of professional baseball scouts.

Well, part of it is that you're gonna' fail, and the failure forces you to ask the questions. Because when you miss on that one guy you thought you had right, then you get humbled very quickly. Then you go "okay, I gotta' do more because I missed it. How did I miss that?" As a scout, you always ask yourself, "how did I miss it?"

Gary echoed the inherent fallibility of scouting decisions as he underscored the importance of owning this perspective as a stimulus for continued learning: "You gotta learn by your mistakes, and I don't care who you are, how good a scout you are, you're gonna make mistakes." In sum, 11 of 13 scout participants described the path to baseball talent identification expertise as a journey that requires the consistent confirmation of humble uncertainty, specifically: evaluative failures fuel internal reflections and *open consideration* of prospects is the product of consistent questions.

A baseball scout with a *narrow mindset* is relatively devoid of humility and reticent to do the work of asking continual questions. Sam described this mindset as the outgrowth of saying "no" when baseball talent is not immediately, visually recognizable and reflective of the talents of current Major League players:

And guys will drill...'what he can't do, can't do, can't do that.' 'Hey, but he has plus power. Hey, this guy can hit a fastball. Hey, this guy's an 80 runner. Hey, this guy, you know, he's a really intelligent baseball player.' But, because if you say 'no,' I don't have to go find makeup. I don't have to go back and see him play again. I ain't' gotta' talk with mom. I ain't' gotta' talk to the coach. I ain't' gotta' talk to the athletic director. I don't have to talk to the news guy. I don't have to talk to anybody.

Said differently, *open consideration* reflects a positive mindset and a passion for doing the work and asking the questions associated with prospect research. In this regard, Bart measured scouting effort as the sum of observational evaluations: "So you see a guy over and over, it takes work ethic. You have to have a work ethic to do this." More poignantly, Sam conjoined inattentive scouting with the tendency to say "no," and he explained it this way:

Because the easiest thing for scouts to say is "no." You know why? Because you don't have to do anything when you say "no." This kid's not a prospect. Go to the next guy. I don't like this guy. Move on to the next guy.

Narrow mindset scouts view their talent identification skills as a previously arrived destination in lieu of embracing the process of their role as comprising perpetual learning and growth. Sam characterized this approach to baseball talent identification as a point of view devoid of humility and passion for prospect research:

And see, when scouts get to the point where they go, 'I'm good. I got it figured out.' Then they're screwed, because now they don't want to learn anymore, they don't have a desire to go out and ask the questions 'why?' Now they walk in the ballpark and go, 'he's a guy, he's not a guy.' No!

Professional baseball scouts are tasked with evaluating thousands of prospects in an industry laden with low odds of success and comprised of only 6,000 minor and 750 Major League players. In reality, most baseball prospects will never be drafted and far fewer will reach the Major Leagues. This climate, from Sam's experiential vantage point, can occlude the *open consideration* of prospects:

So what happens with scouts they become negative because our job is to tear people apart. What they can't do – he can't do this, he can't do that, he can't do this. So after 10 years, 15 years, 20 years, nobody can play because your mindset has gone to what guys can't do.

Mack acknowledged the existence of this mindset and shared: "There's certain guys that I think we overlook. I think we're as scouts, we're more interested in what guys can't rather than what guys can do." Sam provided an illustration of how the *open consideration* of prospects optimally unfolds:

Well, the good scouts, the guys that understand what they're doing, they go 'he does this well, he does this well, this is a weakness but we can improve it.' You can't take a guy that's a three and make him a six. You can take a guy with a three make him a four. He

has a six, which is positive, we can make it a seven. So finding things he does well, and, if we can take the weakness and make them not major weaknesses, then we're okay, because they get to the Big Leagues because of the things they do well, not because of the things they can't.

Breaking away from the search for polished performance expertise and adopting instead a talent development mindset focused on identifying positive baseball tools increases clarity in the midst of uncertainty. Joe portrayed the antithesis of *open consideration* in his critique of college baseball scouts: "The college coaches. They'll see a kid as a sophomore, 'can't play.' When he comes back that next year it's like 'well, he couldn't play last year, why's he gonna' be able to play this year?" Sam also described the absence of *open consideration* and adaptive thinking in collegiate baseball scouts:

You sit there, you college coaches do the same thing – 'not for me. Not for me.' Worst statement ever by anyone that evaluates players: 'not for me.' Now he can't get better. Everybody can get better with work. Everybody can get better – they may not be extremely much better, but you can take a four and make it a five.

In turn, Bart summed his assessment of *narrow mindsets* and minimal research effort in stating: "You can't say go in there one time 'I saw him, this is what he is.' Really?" Sam shared a similar thread of constructive criticism and outlined the perpetual nature of prospect research: "'I saw three games. I met with the family. I'm good.' No you're not! There's more work that has to be done." Perhaps most powerfully, Sam framed the essence of effective scouting dispositions in the following principle: "Well, my biggest thing for scouts is just like players, don't be negative – like players, because somebody has to play." In turn, good baseball scouting is both deliberate and perpetual, and, in Sam's perspective, the necessary information is in the field and available to all: "So we have to continue to keep watching: watching makeup, watching players, because it's all there. You just have to sit back and watch it, and if you can get it, it's good."

Although a *narrow mindset* evaluates a smaller array of prospects and inordinately relies upon genetic and quantitative tools to assumedly enjoy elevated levels of talent identification confidence, this disposition tends to be negative, conduct cursory research, over-focus on talent deficiencies, and overlook performance expertise in the making. Conversely, an *open consideration* disposition embraces the reflective benefits of repeated observations and a questioning mind, owns failure as a stimulus for perpetual learning, identifies prospect strengths, employs adaptive thinking and a talent development mindset, and acknowledges the humble uncertainty associated with talent identification in human performers.

In my data from veteran professional baseball scouts I uncovered three themes of talent identification leading to prospect selection. My findings reflect a sequential process influenced by scout dispositions indicating a framework of: (1) field observation; (2) prospect research; and, (3) projecting expert performers.

In the subsequent sections I define and describe the core elements of the talent identification and player selection process through the narrative perspectives and experiences of my research participants. In turn, I relate how players perform, scouts observe, and how the inductive process of professional baseball talent identification and judgment is revealed.

Field Observation

The second theme arising from my data is field observation. Participant findings revealed a sequential process for professional baseball talent identification. Scouts channel field observation through three coordinated lens of judgment: (1) *physicality and tools*; (2) *confident movements*; and, (3) *comparative recall*. This integrated three-part series of actions lays the foundation for determining the feasibility of conducting deeper prospect research.

Physicality and Tools

Position players and pitchers are first evaluated and graded on the presence of five baseball tools. For position players, these tools consist of hitting for power, hitting for average, running speed, fielding, and arm strength (Rymer, 2013; Story, 2000). The five tools evaluated among pitchers consist of delivery and mechanics, fastball velocity and movement, breaking ball spin, change-up, and control (Rymer, 2013; Story, 2000). In turn, scouts individually attribute a numerical grade to prospects' tools for reporting purposes. Specifically, scouts employ a 20 to 80 point grading scale with 50 representing Major League average: 20 (poor); 30 (well below average); 40 (below average); 50 (average); 60 (above average); 70 (well above average); 80 (outstanding) (Rymer 2013; Story, 2000). This Likert grading scale emerged in the 1970's with the arrival of the Major League Scouting Bureau, and, despite individual differences, its' intended goal is to standardize and quantify tools evaluations (Rymer, 2013).

All scout participants classified tools identification as both the first and the most straightforward stage in the process of baseball talent assessment. Jeb stated that "as far as the evaluation goes that hasn't changed a lot about identifying tools," and he later shared: "You start there [5 tools], and once you see that – when you see a kid that's got that, alright 'how's the body?' 'Where's the body?' You kind of check your boxes." In effect, identifying tools precedes and determines if deeper prospect research is warranted. Additionally, Joe praised the tools scale for its clarity, simplicity, and purifying properties:

The talent's easy. We've got a scale – most of the time he's out. He's out. I mean that's all there is to it, he's out. You know, if he doesn't run fast enough or throw hard enough or hit the ball far enough or make enough contact, then he's out.

Ted also stressed the illuminating expediency of tools grading: "I'm gonna eliminate guys real quick when I don't see certain things, and the tools have to be there. Tools are gonna eliminate the guy 90 percent of the time."

Conceptually, average tool grades represent the minimum entry requirements to professional baseball, and, in Joe's perspective, consistent application of this scale minimizes prospect decision-making dilemmas: "The scale as far as I'm concerned is very simple, very easy for a reason. If we stick to the scale we don't have problems." Tool grades provide Major League baseline comparisons for minimum physical abilities, and, as Mack emphasized, requisite tools outweigh and precede the efficacy of psychological makeup:

And nine times out of 10...the kid's got no chance and let's face it, you can have all the makeup and intangibles that you want – and they are important – but number one you gotta have tools in order to play up there [Major Leagues].

Additionally, each position on the field has a weighted hierarchy of required tools. In plain talk, a prospect's tools need to fit the demands of each defensive position, and offensive tools need to complement an organization's favored style of offense and run production needs. These weighted values can prompt adaptive analyses of prospect strengths and weaknesses, and Joe expounded on the merits of standardized positional profiles:

We have problems when we look out there and we say, 'well, you know, we think he's a shortstop, but you know the shortstop scale says he's at least gotta' have an average arm.' If he doesn't have an average arm he's out. Now, 'where do you move him to now? Second base?' Well he's gotta' have a better arm at third.

The deeper principle in Joe's applied example is the reflective creativity that tool grades can induce when a prospect's physical attributes fail to meet the Major League average for the position he currently plays. In effect, evaluating baseball ability is a visual, interpretative process, and Mack explained how he dissects the component parts of whole tools: "How do I judge you? Well, I can judge you on your BP, your approach, your bat speed, and your balance

- I can see that. And as a fielder, I can see hands, feet, agility, arm strength." In turn, Joe provided a similar yet individually different example of whole-part hitting diagnosis:

The hitting – you put it into components – obviously strength, you put in hand-eye coordination, you're putting in balance. Then you're looking at the ability to make constant, solid contact. You know, once you see that kid that makes consistent, solid contact I think he's got a chance to hit.

To this end, several scouts identified hitting as both the most valuable and the most difficult tool to identify and forecast. Jeb emphasized the importance of the ability to hit: "Once I find – that's a commodity in today's game, is the bat. So, we finally find a bat: now, we're going to pick it apart." Joe described his chief pursuit: "it comes down to the hit. You know we can do all the drills in the world to get his arm good. Speed is kinda a God-given thing. We can make him a better defender." Similarly, Ted revealed the challenges associated with forecasting the transference of hitting power from practice to competitive output: "Power is tougher to me though to project because there's the big strong, brut guy that can muscle it out in BP all day long. May not hit in the game enough...."

Tool assessment is not only the first step for discerning if subsequent evaluations will ensue, but, as Bart confessed, it represents the emotional fascination that moves scouts to act: "What gets you to the ball park as a scout is talent. That's what's pulling us in – 'this kid does this, this kid does that'...." In a deeper sense, Joe combined scouts' movements to follow a prospect with the stimulation of visual knowledge: "He showed you something. It's not your gut telling ya' whether or not you're going to go further, but your eyes have seen something. You've seen that kid." In effect, visual confirmation of prospect tools ignites a sense of evaluative ownership and a desire for deeper investigation, and Joe explained that "if you follow 'em, you're following 'em for a reason – something, a tool has tweaked your interest, whether it's the arm strength, or a breaking ball, or the ability to hit and make contact." In a related

perspective, Manny expounded on the deeper understanding associated with visually experiencing the physicality of prospect tools:

But you still have to see it, still have to see it – you've got to experience it in person. You have to experience the physicality. You have to experience the speed, the power, the – you know from a pitcher's perspective – the deception, the life of the fastball.

The physicality of the game is played out in millisecond intervals and characterized by subtle movements, deceptive actions, and constant adjustments. To this end, Manny also explained how today's evaluative technologies and increased demands for prospect information can emotionally anesthetize scouts:

But in this day and age, I really think it's changed where you really don't have that much emotion because you're just an information-gatherer as an area scout. You're just an information-gatherer, and sometimes it's just hard to watch a game because you're sitting there videoing. You know, 'what was the pitch?' I don't know what the pitch was. 'Was it a curveball?' I don't know. I have no idea.

Although technological advances allow scouts to video prospects' fundamental skills, measure spin rate, track throwing velocities, and compute the speed and distance of the ball off the bat, all scout participants confirmed that visual knowledge in baseball talent identification is most powerfully absorbed in person.

Confident Movements

The second element of visible talent recognition unfolds in tandem with *physicality and tools*. Specifically, several scouts detailed the importance of first impressions and prospect mannerisms – *confident movements*, in a phrase – as critical clues within the process of baseball talent identification. To this end, Joe linked body language with his first observations and his decisions to identify or eliminate prospects:

The first impression is just about everything, because a lot of times you won't go back if a guy gives you a bad first impression, you know? Body language I would probably say is the one thing that first time seeing a kid, "how does he present himself?" Does he have good body language? Does he have bad body language?

Mack echoed this conviction and further elaborated that, in his experience, a prospect's inner self-confidence and baseball identity are visually perceptible through his movements:

You know certain guys have that, have that bounce. They have that walk; they have that confidence about themselves. Body language for me is always important in a kid. How does this kid handle himself? You know, there's an assuredness with this kid, about 'I can get this done. I'm better than everybody else.'

Jermaine both acknowledged his affinity for body language – "Obviously I watch body language on and off the field, in the dugout if you can see him" – and he described the careful study of body language as a method for applying fine focus through a wide funnel talent observation lens:

If you've been around a little bit and you got pretty good eyes, you just watch how they play catch, watch how they walk on and off the field, watch how they go about BP. You can figure it out. I'm not saying you're gonna be right a hundred percent of the time. Your first glimpses are looking at bodies. You go back to that body thing, "this guy looks like a guy." How are they warming up?

Body language is manifested in actions, mannerisms, and movements that leave visual impressions on scouts' minds. In this regard, prospect movements serve as symbolic clues that scouts intuitively interpret as reflections of confidence, maturity, leadership, and desire.

Jermaine disclosed the intentionality of his focused study of prospects' actions, and, in the case of arm strength, he anecdotally explained:

Actions. For a pitcher, or an outfielder or an infielder – for a guy that can throw – they'll show ya' he can throw. Guys who can't throw they'll mess around. But a guy that can throw, that's got an arm, they're gonna show you they can throw....Guys that don't, they won't.

In plain talk, prospects with an above average tool will look for opportunities to display their superiority, to showcase trust in their tools. Joe also avowed an affinity for prospects that are perceptibly not afraid to take charge within the framework of a team:

So, you know you're always looking for that kid that's not afraid to go up to another kid. I don't know what he's saying, but he's talking to him in a private manner 'hey, you need to do it this way' or 'you did great on that, let's go!' You know so that kid in there that's

swattin' asses and out there on the field doing this, he's doing a lot more than just helping his team. He's the guy you're saying, 'shit, he's gonna be a leader.'

In this narrative, Joe shared a personal "taste" for prospects' specific style of play, and he further revealed his desire to see signs of confidence and character through prospects' body language: "You know, it's very difficult to – hopefully you can see it on the surface by the way he goes about his movements, his actions, how he communicates with his coach, how he communicates with the other players." In a different usage, Jermaine observes prospects' reactions to adversity and failure as a gateway for identifying their psychological makeup:

If he has a bad at bat does he throw his bat, or his helmet? If he's a pitcher does he slam something on the ground? How do they communicate with umpires? You see a little bit about their makeup there....

Professional baseball scouts observe, and their intimate awareness of *confident movements* is perhaps a reflection of individual tastes and why scouts see what they see. However, in most instances scouts observe from afar and do not enjoy proximal access to player movements compared to coaches. Coaches observe within the action, and scouts evaluate at a distance, and Jermaine described these observational limitations and the intuitive responses prospects can prompt within scouts:

We don't get a chance as a scout to have the hands on, first hand, in the locker room with guys, to see how guys react, how they react to coaching, suggested changes. Do guys roll their eyes on you? Or you try to suggest a change to a hitter or pitcher, do they fight you with it or do they embrace it and go with it?

At a deeper level, Jermaine described his search for dynamic prospects – that is, prospects whose movements demonstrate energy and direction:

Is there direction in where they're going? You know, some guys – and I got a feel for a couple guys here, and I got in my notes 'now, he really doesn't want to be out there with 'em. He's just playing.'

Comparative Recall

Tool grades represent baseline baseball ability measurements and *confident movements* provide impressions of psychological attributes; however, *comparative recall* integrates both of these components by correlating scouts' visible talent evaluations with historical comparisons. To this end, conversations with all scout participants consistently included performance examples of past prospects, and Manny shared that his professional scout training emphasized the development of a personal prospect catalogue: "you've got a catalogue of what you've seen of the players, all the years I've been on the road and seeing guys. It's in my memory. It's here!" As depicted in Manny's words, a scout's mental catalogue represents a personal, experiential library of visual knowledge that is used to comparatively analyze prospects' abilities:

So, it's that catalogue that you go to, to say 'okay, this guy looks like this guy – his bat speed; his swing reminds me of this; his arm swing; his breaking ball; his fastball reminds me; his delivery reminds me of this guy.' I think that's a start.

Comparison is a beginning point for evaluating the combination of a prospect's tools and makeup at a deeper level, and, as scout participants described, this type of reflective analysis does not end at some future time. Christensen (2009), in his study of talent identification among high-level Danish soccer coaches who served as scouts, found that: "The main source of knowledge of these coaches comes from their constant observation of players (p. 372)." Over a lengthy history, professional baseball scouts did not possess radar guns, video, and other empirical methods to identify baseball prospects; rather, scouts consistently relied on vision and *comparative recall* as their primary sources of talent identification knowledge. Descriptively, Barney reminisced about his youthful experiences with veteran scouts and how they employed their memories as a research data base and an analytical tool for making prospect decisions:

All the great scouts I grew up listening to, all those guys had the greatest memories in the world. You know what I mean? Man, it's something to behold – I think – because you're referencing, you're making comparisons, you're making judgements on guys....

On a personal level, Barney shared how he prioritizes his prospect memory in talent identification: "You just factor all that information in, and I try to use it as reference. I try to remember guys — 'hey, this is what Brian Buchanan looked like'...." Mack highlighted the value of archival data bases in veteran scouts, and, he stated, in the end, prospect judgment is a product of comparison: "I think that in itself, that data base that you have built up over the last 40 years bodes really, really strong. And it's all about comparison, you know. How does this kid compare to those guys?" More specifically, Mack outlined how he applies his experiential recollections when he evaluates prospects in the field:

I go out and watch a high school shortstop. I go back to when I had Rafael Belliard as my shortstop. And the guys in that league, in the Carolina League in 1980 and '81 – Jose Oquendo, Julio Franco, Tony Franco, Jackie Gutierrez, and Rafael Belliard.

Long-term memories are consistently utilized by professional baseball scouts, and Barney defined his *comparative recall* as a questioning prompt that leads him to deeper analysis and reflection: "The referencing you remember and you go 'what made him different'?" More clearly expressed, Barney shared how his comparative recollections function to validate and provide added meaning to his prospect evaluation decisions:

...but it still goes down to 'who's this kid look like at the same age? Who do you remember? What did this kid do that got to the Big Leagues....'You know what I mean? That stuff they can't put in a camera, or a radar gun, or anything like that. That's why they still need guys like me. I think.

With similar effect, Ted's usage of memorable references triggers comparative questions he employs to forecast prospects' future performance capabilities: "But I'm gonna draw back and say, 'is this guy the kind of player that I remember from guys in the past? And is he gonna be able to make adjustments?" Shifting the paradigm, Gary explained how he uses his prospect

catalogue to eliminate prospects. That is, Gary disclosed how he compares prospect talents and attributes to minor league players who did not advance to the Major Leagues:

...because I was in the minor leagues coaching, I'll see a kid and say to myself 'well that kid right there is gonna be just like this kid I had in A Ball, and he never got out of A Ball.' Same style, same skill.... Instead of seeing them as a Big Leaguer, see 'em as a minor leaguer where 'this guy had better stuff, and he never got outta A Ball.'

The immediate nature of *comparative recall* serves as an ever-present interpretative tool, and the quality and depth of one's memorable examples influences the flexibility of scouts' talent identification lens. Bart labeled his catalogue as a frame of reference – "because I've done this 28 years, and I've seen them all. The Upton's – B.J. Upton, Justin Upton – David Wright, Ryan Zimmerman, Justin Verlander, Chris Widger, Jerry DiPoto." – and Manny shared that he referenced his "all" to determine a prospect's physical potential:

So, when I see a guy, very often this guy reminds me of this guy; this guy reminds me of this guy. And I think that will lead you in a direction from a physical perspective whether or not that individual has a chance to play in the Big Leagues.

Similarly, Ted described his comparative catalogue as a translation device that he uses in the field to extract meaning when he evaluates players: "So I'm using past experiences, decodes of past players that I've seen come and go,... and I'm taking all that, and I'm using that when I see players." Perhaps most powerfully, Barney linked scouts' comparative recollections with talent identification confidence and stated: "You just have to trust this is what these guys look like."

Ten of 13 scout participants explained that their *comparative recall* also functions in an instructive capacity by imbedding recollections of previously overlooked prospects on their memories. Jeb transparently illustrated how his memorable recollections of scouting "misses" enlarged his evaluative lens and led him to a wider funnel of *open consideration*:

...you see a kid, and they bring back the mistakes you made over the years, 'hey, I missed on this one. I didn't dig deep enough on that one,' you know. There was more to this kid than I saw. I kinda overlooked it because he was 5'10", and I remembered

Pedroia, but I just didn't go there, you know? It's brought a lot more guys into the draft now. Then you can say, 'hey, he's very similar here.'

Comparatively, Joe acknowledged how he administers periodic self-evaluation check-ups to clarify and strengthen his internal prospect catalogue: "It's all about the history that you've gone through, and hopefully you do a self-evaluation check every year – periodically, so that...sometimes more than every year. You know, 'why did I miss on that guy? What was it?"

In brief, professional baseball is both a game of failure and a business of human performance expertise, and Joe shared two impactful realities: (1) some prospects display impressive tools but unexplainably fail to succeed and advance; and, (2) evaluative "misses" instruct but not all "misses" are immediately discernable:

A lot of time, you know what, he just can't play. It just comes down to, like the tools that I drafted, he just couldn't hit. He couldn't synthesize it to the point where he could succeed. You know? He'd succeed for a short while and then be just...it never, never became memory for him. I don't know, but you've gotta' go off those experiences. That one there I don't know if I'll ever be able to tell why that kid didn't make it.

In addition, Jeb shared how memorable misses that instruct are instrumental in developing new observational habits: "So what I've done is, I'll see a kid that reminds me – that's a 'Pedroia-like' kid on his on-field preparations, and then you get to know the kid." Jeb also added that inserting memorable comparisons into scouting reports can increase a scout's leverage and expand an organization's *open consideration* of prospects:

You know, get him on the board, maybe in a better spot, because you tell them 'hey, this kid is very similar to Pedroia, what I saw in Pedroia.' His work ethic. His makeup. His ability. His physical ability. They all just scream, 'Pedroia' to ya'. Now, once you get to know the kid, we'll get to see if he has the same Pedroia traits that he looks like he exhibits on the field.

In this regard, Ted confirmed his organization's preference for inserting a "comparison player" in scouting reports, and Mack explained how comparison players create movies in the minds of scouts' direct reports: "As a scout, I think to give your scouting director or the powers to be a

picture of what you're seeing, you always go back to a guy this kid reminds you of." *Open consideration* casts a wider observational funnel and scouts' long-term prospect memories potentially elevate the odds for the inclusion of outlier prospects. Through this lens, Jeb described a real-time, non-prototype prospect example to demonstrate how comparative recollections prompt *open consideration*, adaptive thinking, and deeper research:

So, there's a kid like [name] who's 5'10", 205. The body can go either way, but he can hit. It's a bat. I don't know where he's gonna play. The body's already not moving very well as far as defensively. It's gonna be a challenge for him to be an adequate defender. It would be third or right field, but his bat's gotta chance to carry him. That goes back to – and I'm thinking, I don't know what John Kruk looked like as a young kid, but this might've been it. So, I'm thinking, okay if this kid's got the heart, the desire, the head and the heart and all the things behind the scenes that's positive, I may take a chance on that player....

Visual talent recognition begins with *physicality and tools* identification and employs a standardized numerical scale to quantify individual evaluations for reporting purposes. Scout participants described tools assessment as clear, straightforward, and the first step in determining if deeper research is warranted. Deeper still, *tools and physicality* evaluation serves as the emotional force that draws scouts to the ball park, and prospects' *confident movements* – first impressions – provide scouts with symbolic clues of their inner baseball identities. In turn, *comparative recall* correlates scouts' visual talent evaluations with their personal data base of observational knowledge, thereby initiating creative reflection, prompting adaptive thinking, and launching the beginning stages of prospect analysis. I now turn to the third theme in my data, prospect research methods.

Prospect Research

Professional scout participants identified investigative prospect research as the second stage of baseball talent identification leading to prospect selection. Specifically, when scouts

visibly identify prospects' potential Major League talents, this finding activates a basis for conducting deeper research. To this end, scout participants disclosed a three-part investigative sequence of prospect research steps: (1) homework questions; (2) makeup reasoning; and, (3) valued makeup traits.

Homework Questions

Former Atlanta Braves scouting director Roy Clark described makeup as "the most difficult thing to define" (Shanks, 2005, p. 58); veteran MLB scouting director Lou Gorman maintained that "makeup drives great players" (Shanks, 2005, p. 177); and, longtime scout Al Kubiski believed advancement to the Major Leagues is "all about makeup" (Shanks, 2005, p. 211). Ted voiced the difficulty of balancing tools and makeup identification in the scouting process: "First of all, the makeup is the hardest thing for any of us to do because we're looking at tools first – run, throw, field." Of greater challenge, Jermaine stated that "Makeup is really hard to put a definite answer on what it is." Strategically, Jermaine acknowledged that the absence of a standard definition for makeup yields measurement variances across scouts: "Makeup is really tough in a lot of respects. I mean it's not a numbers game where you can put a definite number on this guy. It varies so much from individual to individual." In near unanimity, scout participants shared that when baseball tools are positively identified, the next phase of evaluation requires taking the time to ask tough questions and conduct the most difficult research of all – interpretative prospect research.

In Wes's words, administering homework questions to discover psychological makeup is investigative, conversational, and relational:

Once I identify a guy - that I like a guy - that's when I want to get into makeup. The way I like to do that, once I like 'em I like to meet 'em, the parents. I like to meet the kid. I

like to know what they're all about, where they live, how they live. You can't do that unless you get to know 'em...I'm talking about getting to know the people, where they live, and all that.

Addressing this process, Sam challenged and questioned scouts' reluctance to make meaningful prospect inquiries: "I think sometimes we don't do enough research when it comes to makeup. We don't ask enough questions. Why?" Not unlike Wes, Sam's remedy for this investigative gap is to initiate exploratory conversations: "Because sometimes...just sit down and have a conversation with someone. We don't do that anymore. We don't sit down, just talk to the kid, "how you doing? What's going on?" For Wes, visiting a prospect's home is "the first thing – one of the key things", and although meaningful conversation is fundamental to identifying makeup, so too is active listening: "Like I was tellin' about getting in the house – you'll find out some stuff you didn't know and what you want to know without running your mouth."

Jeb described this investigative process as an excavation dig into a prospect's identity and developmental pedigree: "if the tools are there that's when you start digging deeper – as far as the background, the makeup, the family. Where's the red flag? Is there any red flags with this kid?" The makeup identification process is no longer "a very simple in house meeting;" rather, in Jeb's perspective the financial stakes are higher and makeup research "has turned into a big process anymore." Fundamentally, Jeb characterized prospect research as a series of checkpoints with a duration determined by "right fit" answers: "If you keep checking boxes, you can keep going, and if it keeps coming up clean, well let's go – we're in. Now let's move forward, let's start scouting. Let's do all of the work here." All the work in this context for Jeb includes a litany of homework questions: "what's his family? What's his background? Does he have two parents? Does he treat people well off the field?" Comparatively, Jermaine underscored the importance of getting in the home and understanding a prospect and his parents – "You need to

know the player. You need to know the parents." However, Jermaine also conveyed this need with mild apprehension - "But they can fool you a little bit too." In this regard, Ted expressed a heightened awareness for prospect deception: "I can tell you so many different stories where the makeup, you got fooled by guys. I've seen teenage alcoholics, drug addicts, and everything else that were number one picks."

More revealingly, Ted suggested that physical talent in combination with prospects' correct answers to homework questions can confuse scouts' deeper insights and interfere with effective research:

They answered all the questions "yes, sir; no, sir," and they fooled you all through school – whatever school they were at – their talent overtook whatever they were doing on the side, but then it all caught up to them in pro ball. They just went to pot once the competition got a little tougher.

On the other hand, Sam shared an incident where exceptional tools overshadowed unfavorable makeup research and resulted in prospect selection and eventual release due to lack of performance development:

I go in there, sit down, and every person in that room...no one said anything great about the kid. Lazy. He missed in one class, he missed 27 days of class. That was the most days he missed in a class. The least amount of days he missed in any of his classes was 21 days. Not good makeup for me. Just not, and I'm getting beat over the head because he's got tools. But we take him in the second round. We sign him.

Transparently, Ted acknowledged the inherent uncertainty associated with makeup research and homework questions: "Makeup is just so critical, and yet you're never sure that your guy is really what he says he is." Ted diagnosed a deeper fear associated with missing on makeup as a result of limited observational opportunities: "I've seen guys who ended up having horrendous makeup, but you didn't see it when you're only seeing a couple of games." To this end, Wes associated prospects' failed developmental advancement with inadequate makeup research: "I can name you player after player that were failures that the makeup was not researched enough.

You don't know enough about 'em, particularly the parents, particularly the background, particularly the kid, you just don't know enough about 'em."

Speaking to research effectiveness, Sam reinforced the importance of investigative depth and persistence, and he voiced caution regarding the incomplete nature of visual knowledge:

Take the time. Sometimes it just takes that. So we don't want to...sometimes as scouts we walk in and it's all about what we do visually. See tools, see this, see that. 'I see it, I see it, I got it.' Sometimes we have to ask questions, and go in and dig deeper, and realize that 'hey, there's more to this. There's more to this individual, and we can't stop.'

In a forewarning tone, Wes underscored the importance of scouts doing their own investigative work because of the long term organizational costs and personal accountability associated with unverified research:

It's doing your work. Not just hearsay, and one little visit, and this and that – research, particularly if you're gonna give a lot of money and put your ass on the line. Because once you get him, you got him – it's over, you gotta deal with it.

To this end, Wes intensely stressed the value of scouts' individual effort and independent judgment within the social fabric of the professional scouting fraternity:

One of the worst mistakes a scout can make is take negative makeup that you hear as fact. It's called rumor. I'm tellin' ya', if you're interested in a guy do your own work, and that's not listening to somebody else. 'Oh, this guy's this; this guy's that.' It just doesn't work.

The commitment to dig deeper into prospect research, in Sam's viewpoint, represents a decisive test for identifying effective and ineffective professional baseball scouts: "So, the good scouts that do the work, they find out the information. They find out the makeup. They find out what happens because they said 'yes'." In this context, Sam also emphasized the importance of "raising the heat" and asking "tough questions" to uncover deeper meaning because: "The information's always there, you just have to let it come to you." Barry candidly described the ever-present nature of prospect data: "Yea, the information's right in front of ya." Being

personally committed to taking the time to uncover prospect data - while integral to effective baseball scouting - is inadequate without firm conviction. Specifically, Barney addressed the importance of scouts' self-confidence, trust, and belief throughout the process of interpretative prospect research: "You gotta do a lot of research. You gotta watch, and you've gotta trust what you've seen before and believe in it." Said differently with similar meaning, Bart stated that "you have to have a history on a guy, and you've got to see him over and over and over again."

For Justin, prospect decisions are tested and informed by personal meetings with prospects:

I want to see what makes him tick. I want to see does he look me eye to eye? Is he nervous? Is he confident? A kid normally will tell you, he will show you features of what type of person this kid is.

Similarly, Wes employs personal interviews as a method for determining the quality of prospects' maturity and self-confidence:

In my opinion, I might be dead wrong but I don't think so, if you take a kid and sit down and talk to 'em and you're looking at him straight in the face and he won't look at ya' – he looks here, he looks there, he looks down – I'm not saying you can etch it in stone, but I'm telling you most of the time they've got some problems.

Justin also employs prospect interviews to identify the nature of a prospect's personal habits and self-discipline: "I mean, is this kid a worker? If you sit down and talk to a kid and ask him to go through his day, or go through his week, normally he's gonna tell you exactly what." Jermaine shared a preference for conducting prospect research in a tryout camp setting so he can simultaneously view a prospect's attitude and effort in the midst of multiple interactions: "if I can get him in a tryout camp I can get a better feel for this guy's work ethic, how he interacts with other players, how interacts with the coaching staff."

Sharing a real time example, Jeb explained the importance of identifying makeup and its resultant influence on scouts' decision making in light of identifiable tools: "Yea, I mean if that

kid doesn't have the work ethic and the love of the game to work on the things he's not good at, he's going to be stuck as just a DH hitting and trying to survive in the minor leagues for me."

Jeb further elaborated on this example and the importance of prospects' familial influence and support:

But all indications on that particular kid are that he's got all the intangibles that we're looking for, and now we're gonna dig a little deeper into him and really find out if what we see on the field is behind the scenes in his family that will allow him to maximize his gifts that he does have.

In addition to the character of prospects' home lives, family biology can also influence scouts' perceptions of prospects' physical tools:

Why is he like that? Well, because his family's like that. He was born with that type of frame and body, and he can't do anything about that. He can improve it, and he can improve his agility, but it's gonna take all (Jeb).

Culturally, Wes described how prospects' family life can potentially derail their readiness to embrace the developmental rigor of the minor leagues:

I've signed guys, drafted guys – as a scouting director and a scout – and once I got into their house I didn't like what I saw. I didn't like the way the parents were. I didn't like, for example, the mother worked and the father didn't do anything. I didn't like a house that was dirty, filthy. You say, 'well, this is minute' – it's not minute because I've seen so much of this stuff. The way they live, the way they act in their home – it turns out to be a negative deal on where they're going if you sign him.

In a similar context, Ted associated a previous signee's unstable family background with his inadequate capacity for coping with the pressures of professional baseball. Ted described family background research as an impressionable and apprehensive element in scouts' prospect judgments:

...he had horrible background so he couldn't handle anything. He was a mess. I'll never forget it. Those are things you just don't forget. So the more you see of that, the more you're really worried about the makeup when you're signing a player.

Prospect preparedness for minor league development for Joe is signaled through actions and responses that convey respect for teammates and family:

It really comes down to identifying what kind of a kid you got. How does he treat his teammates? How does he treat his family? You know, 'is it mom and dad I need this or I need that?' You know that guy, he's not going to go far unless his talent is just that far. The really good ones they're not like that.

Jermaine noted that he appreciates prospects who demonstrate regard for their parents: "That's always a big thing for me – do they respect mom and dad?" On the flip side, Ted recalled home visits where parents cast the impression of vicariously living through the earning potential of their son, the prospect: "That's what scared ya' right off the bat because you could see the parents. They were acting like they were gonna live off the kid and everything, and I'm going 'oh my God." Similarly, Sam shared examples where desire for financial gain tempts prospects and their parents to respond untruthfully to homework questions: "it's like the other kid we had that lied – he wanted the money. The family wanted the money. They lied. So you don't know." While Bart stated first impressions and prospects' responses to homework questions prevail in his makeup assessments, he also expressed that his critical indicators for respect are defined by: "how respectful they are to you as a scout. Do they think they're entitled to be drafted, or do they think it's something they've earned?"

While scout participants described homework questions as candid, testing, and direct, Sam attributed his investigative approach to a mentor who provided him with the following counsel: "My first boss, Terry Ryan, he said 'if you don't get thrown outa' the house at least once you're not asking the right questions." For Sam, homework questions are about reflecting back to prospects "what they said" in order to discern truth and commitment. Experientially, Sam emphasized the importance of asking direct questions to stimulate personally accountable responses from prospects:

I say, 'okay, are you ready to do this?' And then kids start changing. Now, all of a sudden, you start seeing some chinks in their armor. Are they really going to do this? You force him to talk a little bit.

Elaborating further, in order to extract prospects' actual thoughts and motivations Sam emphasized the importance of silencing parental comments during homework questioning.

Recalling a specific example, Sam disclosed the following scene:

'I'm not talking to you, I need to know what you want to do because this is your life. They're not going to be playing. They're going to be in the stands. Are you ready to do this?' And some kids will go, 'I really want to go to college.' 'Okay, go to college – let's go.'

Embracing a similar goal with a slightly different approach, Bart ascertains prospects' passion and perseverance as he conveys the specific challenges, responsibilities, and comfort zone changes associated with minor league life:

Is he gonna say 'it aint' what I thought?' You gotta do your homework. You gotta know what you're getting into as a player. I can paint, and I'm good at this, when I paint a picture for them I give it to them straight.

In a phrase, Bart believes in reciprocal prospect research. That is, minor league baseball is difficult and not for everyone, and, in Bart's viewpoint, fully informing prospects about these realities enhances the clarity of a prospect's occupational vision and the credibility of a scout's reputation:

Yea, and I have to look at it like right now, whatever kids I'm dealing with this draft ends in a week, and once it's all said and done with, these kids are going to be able to tell the next group, and the next group after that, 'I did the right thing. That guy told me the truth. He worked with me. He gave me a pretty good picture of everything.'

For Sam, a scout's credibility is forged through the process of homework questions, and an area scouts' role is to "represent the first line of contact with the players, and they have to keep those relationships." Sam believes this is a perpetual process throughout a player's professional career: "There has to continue to be contact. What's the guy doing? 'How you doing in the off-

season? Did you like your first year? Like your second year?" However, Sam also shared the negative tendency among certain scouts is to sign the player and cease communication: "I signed a guy – okay, done."

Homework questions represent the direct evaluation step that prompts scouts to investigate leads and assess prospects' identity and support systems while building relationships through a series of checkpoints. While scout participants acknowledged the critical importance of uncovering answers to homework questions, scouts also disclosed the uncertainties and deceptive responses inherent in this process. In turn, exceptional tools can occlude signs of negative makeup, and makeup rumors can lead scouts astray from their commitment to personally conduct research and uncover relevant prospect data.

Makeup Reasoning

Talent is highly valued among professional baseball scouts, but talent identification research is devoid of qualitative studies that examine how scouts define, identify, and interpret prospects' psychological attributes. Scouts employ the term "makeup" when referring to prospects' mindsets, and I adopted the term "makeup reasoning" to describe how scout participants form their definitions, inferences, and conclusions about makeup.

Scout participants overwhelmingly validated the importance of makeup, and Jeb portrayed this elevated importance as a movement of emphasis within today's Major League scouting departments: "So, it's grown as far as the makeup, identifying makeup. There are staffs now with a lot of organizations now that that's what their specialty is." Barry attributed the genesis of this trend to the Atlanta Braves and their 14-year string of consecutive Divisional Championships: "They were assessing the makeup, and obviously other clubs were going 'what

are they doing?' And so everybody started doing it". Evaluating the ascension and success of the Kansas City Royals, Sam stated: "The reason they're successful: because they got makeup guys. They got guys that, on the field, they battle. They try to beat you to death. They're going to battle you every game, every at bat, all those things."

Mack traced the need for this transformational development in makeup assessment to the changing culture and increased commercialization of amateur baseball. Specifically, Mack described the amateur game as increasingly focused upon the marketable exposure of prospects' tools. As a result, this organizational shift triggered an incremental erosion of the team concept within the attitudes of many prospects: "Everything we do is not team oriented anymore. There is no Legion ball. We gotta get to showcases. This is all about 'me.' 'What am I throwing on the gun? What is my running time?" Extending this perspective to the assessment of makeup at the minor league level, Jermaine inferred that the premiums placed on minor league prospects' physical tools supplant the relevance of makeup. Specifically, Jermaine stated, "It's so much talent-driven and tool-driven that we're not as concerned with what the guy's makeup is. We think we can change them somewhat."

In many ways, change is synonymous with makeup, or, more clearly, makeup is often viewed by professional scouts as a change agent - an internal dynamic that transforms the development and impact of prospects' physical performances. For Mack, the litmus test for assessing the presence of good makeup is when "...someone's makeup allows you to play above your tools. When you can play above your tools that's special." In Justin's perspective, prospects with good makeup recognizably produce in their training and performances: "they go the extra length to get things done, and I think the way they play the game you can tell who's got makeup and who's not." In Gary's viewpoint, makeup is exceedingly more difficult to verify

compared to tools, and, perhaps most importantly, he stated that makeup and tools are interdependent. In addition, Gary highlighted both the synergistic and the self-sabotaging effects of good and bad makeup:

We can see the tools, and I think why makeup is so important is you have players that have marginal tools, if they have great makeup they're gonna get the most out of those tools. And vice versa if you have players that have great tools, their makeup is questionable they're not gonna utilize the tools that they have.

While all scout participants confirmed the dynamic effects of makeup, 11 participants also acknowledged the absence of a standardized definition of this construct within the scouting ranks. When asked to define makeup, Manny responded, "It's a very open-ended question because you can go on and on forever." In similar fashion, Jermaine exclaimed, "makeup is, whew – we could talk all day about makeup, and each guy's gonna be a little bit different probably." Manny further elaborated and summarized makeup as a matter of individual taste: "I guess what I've found is that everybody has a different definition of it, what good makeup is and what bad makeup is." Echoing Gary's sentiments, Joe labeled makeup as "the most difficult part." Difficult because, in Joe's estimation, identifying makeup requires that scouts read prospects' desires and "check inside their hearts – what is their intestinal fortitude?" Deeper still, Joe measures makeup through the lens of a three-part checklist that lays a foundation for talent development: "You know, as far as makeup – the character, the ability to learn, put that learning into action." Additionally, Justin established that "...makeup is a very, very important part of it [talent identification], and everybody's makeup is different." When asked to describe makeup, Wes characterized the request as a "loaded question," and he responded that makeup is a measure of full commitment and the understanding of one's employment mission: "Well, how you define it is to me when you employ somebody is how they're gonna' go about their business, perceive their business, take their business to the field, outside the field." Circling back, Manny

associated scouts' individual tastes for makeup with the distinctiveness of their prior individual experiences: "Okay, and that [definition of makeup] comes from our experiences, and who we've played with, who we've coached, who we've recruited, and who we've scouted in determining what good makeup is."

The absence of a standardized definition for makeup can create confusion, and Sam described scouts' occasional misunderstandings of makeup as both procedural and taxonomic: "It's a whole big process, and what people confuse for me is on-the-field-makeup and off-the-field-makeup. It's two totally different entities." Procedural for Sam represents a deliberate investigation mapping a prospect's growth and maturation beginning at the point of tools identification:

Well, for most of us and for myself makeup starts way before you get to the ballpark. We start doing makeup work, if you're talking about an amateur player, when you first see him as a ninth grader or a tenth grader. You start very early in the process, and you try to watch how he grows from that ninth grade year to that twelve grade year, the maturity level, the mom and the dad, the family.

Shared with a different focus but similar message, Wes exposed the false notion that makeup is capable of quick identification; rather, makeup assessment unfolds over a longitudinal period of time:

You can't establish makeup on one look, on one visit, on one conversation. You can't do it. This is one of the fallacies of scouting today with the money factor. We're dealing with this right now on our staff. Either they don't want to do it; either they don't know how to do it – it's a problem. You've got to spend time on makeup.

On the other hand, the taxonomic classifications of on-field and off-field makeup outline the situationally specific nature of psychological attributes. In addition to Sam, Justin qualified makeup in this two-part fashion, and Gary defined on-field and off-field makeup with a series of questions: "On-the-field-makeup is does he compete? Does he come through in pressure

situations? Does he play hard? Off-the-field obviously are habits that they have. Is he a partier? Is he into drugs or alcohol?" Employing a series of penetrating questions, Sam role-played a dialogue with a young scout to illustrate the separation of off-field and on-field makeup:

So guys get it a little confused, especially young scouts. They get it confused. They come in, 'hey, I love this guy – he's a great kid.' Okay, well, wait a minute, 'what does he do on the field? Does he take the extra base? Is he in the dugout locked-in and focused, or is he over there playing around? When coach comes out and talks to him, what does he say, what does he not say, what's his body language?' All those things come into play when you start talking about makeup.

Nine scout participants acknowledged both the difficultly and requisite time involved in makeup assessment, and Manny believes these realities ensure a measure of job security for area scouts: "you're still gonna need pro scouts because they're still gonna have to determine makeup because that's the most important part." As a point of clarification and correction, Sam questioned scouts' tendency to operationalize makeup as a broad construct: "I don't really think makeup is the best word to use sometimes because the word encompasses too much. Sometimes you need to talk about the head, the heart, how he feels, what happens." Sam issued caution with regard to some scouts' inclinations to assess makeup through an all-or-none lens: "It's not fair because every kid's situation is different." Conceptually, Sam observes makeup as both individual and situationally specific: "You look at the situation first. His makeup comes from where his situation is as well." More specifically, Sam illustrated the importance of empathy among scouts, or, more clearly, walking in the shoes of the prospect when assessing makeup:

So, if a kid's gotta' battle to get to practice every day, doesn't have a car to get there, he might not be the greatest, most mature kid. But when he goes out on that field he goes out and busts his butt and works hard. Now, when he leaves the field he's going to a whole different environment – his makeup has to change. It might be...his portion of solitude might be the field. Sometimes we just have to dig deeper. Sometimes a young scout won't dig deeper.

Digging deeper – taking the time to conduct thorough research – represented a reoccurring theme among nearly all scout participants. Applied to makeup assessment, Sam advised that makeup identification, like tools verification, is merely an assessment process to determine readiness for minor league player development:

So a scout goes sometimes 'I know the makeup, I know the makeup,' and we go, 'no, you think you know the makeup.' We're not going to know the makeup until we see 'em every day. We're not going to know the makeup until he fails. We're not going to know the makeup until he gets away from home. He's gotta' do some stuff, and what does he do then? Mom and dad are not there. They're not telling him what to do. Is he gonna' be on time, not be on time?

Justin echoed this reasoning and stated that makeup development is ongoing and born of individual backgrounds: "I think makeup can be improved, but I think a lot of it is upbringing. I think everybody is individual on the makeup, but in order to get to the Big Leagues I think 90 percent of the Big League players have average to above average makeup." Average in this context refers to average at the Major League level, and, for Bart, the strength and importance of a prospect's makeup predicts his resiliency and retention throughout the player development process: "Ability brings you to the ball park, but it's makeup and character that will keep you there once you're drafted and signed because it's peaks and valleys, highs and lows."

In Today's MLB economy, forecasting prospects' persistence represents a key element in scouts' makeup reasoning. In this light, Gary commented that makeup assessment is more important than ever before: "Now, it's more and more, it's even more important because of the money we're giving out." In Wes's perspective, "missing on makeup" is the "worst thing," and, if given the choice between misevaluating makeup or physical tools, Wes chooses the latter because of the low odds associated with advancement to the Major Leagues:

If I over-evaluate a player physically, under-evaluate a player physically, I'd rather do that because baseball's a failure business. If you don't believe it, go in the minor leagues and look. One thing I don't want to miss on is makeup.

In this respect, Manny defined a scout's ultimate job as an exercise in answering the question, "what's gonna get that individual to the Major League level?" In uncovering the answers to this question, Manny highlighted the paradox that periodically exists between on-field and off-field makeup: "There are guys that don't do things right off the field, but on the field amazing makeup." Sam's appraisal of makeup dilemmas is to evaluate the two types of makeup:

What we don't want: rapists, criminals, guys who do drugs. We want to stay away from those kinds of players. So if that's off the field, that's not good. We want to stay away from those guys. We don't need those guys around any other kids. We try to develop all these young men, and we don't want that at all.

Although professional baseball players individually advance to the Major Leagues, baseball is a team sport and this reality attunes some scout participants' affinity for "right fit" makeup. For Bart, "right fit" represents the answers to three questions: "Is he a good teammate? Does he follow instructions? Do guys like him?" In this light, Joe equated team success with the strength of a team's interpersonal relationships:

You know if, if you see a bad team I'll show you a team that doesn't care for one another. You know, you see a good team, and you say, 'geez, how are they winning?' It's usually because they care for one another.

For Justin, right fit and persistence are measured by resiliency in the midst of personal struggle within the context of the team: "How are they as teammates? Do they lift the other guy up when they're down?"

I devised the term "makeup reasoning" to explain how scout participants formed their definitions, inferences, and conclusions with regard to prospects' psychological attributes.

Although absent a standardized definition, makeup is repeatedly viewed by veteran scouts as a psychological construct that transforms the impact and trajectory of player development and the achievement of performance expertise. In turn, scouts affirmed that makeup assessment is difficult to accurately determine and its performance effects in combination with physical tools

range from self-sabotage to synergy. Scout participants confirmed that makeup is incapable of quick identification, and, while incorrectly viewed as a broad construct by less experienced scouts, makeup is more accurately a longitudinal process branched into the categories of on-field and off-field makeup. To this end, makeup is both individual and situationally specific, and, best assessed, requires scouts to embrace empathy and walk in the shoes of the prospect in order to forecast resiliency and persistence within a game of failure in the midst of high financial stakes.

Valued Makeup Traits

Average or better tools – augmented by *confident movements* and favorable *comparative* recall – signal the need for professional baseball scouts to administer homework questioning and begin the process of reasoning makeup. The final step of prospect research maps how professional baseball scouts interpret prospects' psychological attributes. More specifically, this step delineates a trilogy of the most valued makeup traits disclosed by scout participants – in brief, the makeup properties scouts look for, and how they find them: (1) *competitive* adaptability; (2) *extra effort*; and, (3) *instinct and intellect*.

Competitive Adaptability

The trait "competitive adaptability" emerged from participant narratives that highlighted the efficacy of competing in the midst of challenge and adversity. Sam emphasized the unparalleled value of observing prospects when they fail as a methodology for identifying makeup: "if you're a scout and walk in and a guy fails, that might be your best day of scouting for the year." Barney echoed this conviction and shared: "The number one thing I like seeing is whether a kid has some adversity or not." Explained differently, Justin focuses on the quality of a prospect's style of play in the midst of slump or success: "You're gonna fail a lot of times, and how does he play when they're up, and how does he play when they're down? That's a very

important thing." The importance of evaluating prospects in the midst of slumps for Justin yields additional observational questions to determine effort: "Do they hustle at all points? Do they still run out all balls? Do they dive for plays?" Bart's questions in times of slumps seek to identify hardiness: "How does he come back? Does he cave in? Does he keep going?" For Jermaine, baseball is a game of failure, and the key to advancement in professional baseball is "how you handle that failure."

Seeing a prospect fail represents a critical moment for scouts to see what comes next, to witness the resolve, adaptability, and competitive mindset responses of prospects. Sam characterized these "best day of scouting" opportunities as case study experiments that test the presence and composition of makeup:

So for me, when I start looking at kids, I love seeing them fail when I go see 'em. Because most of these kids are great kids, great players, they've never failed. So when you really find out makeup is when a kid fails. What does he do next?

Sharing a similar affinity for evaluating makeup in the midst of failure, Barney stated that these moments provide scouts with a mental understanding of a prospect's passion and perseverance:

I always like to see a kid struggle – just a little bit – then see how he handles that, and then that gives me a pretty good idea of what kind of mental makeup he has, and what type of grit, and what type of kid he is.

Competitive failure creates opportunity for an adaptive response, and Barney stated that the substance of "how" prospects counter in these moments reveals makeup: "When things go wrong you want to see how they react and how they pull themselves out of it when things go bad." More specifically, Barney explained that he actively looks for prospects that have the makeup to revive themselves in the midst of slumps or subpar performances: "You gotta' reinvent yourself, and you gotta' reprove yourself, and those are the guys I'm looking for."

Shifting away from radar guns and peak velocities, Justin discussed the importance of viewing pitchers' competitive adaptability during those outings when they do not have their best "stuff." Specifically, assessment opportunities such as these force individual improvisation and strategic creativity in the moment:

When the kid pitches and don't have his good stuff, how does he compete? For me it's very, very important because every time pitchers go out they don't always have their best stuff. If he don't have his best stuff can he still go out and find a way to beat you, or does he start looking in the dugout every moment for the coach to come out there?

Jermaine echoed a similar affinity for identifying how pitchers determine their pitch selection in response to the flow of the game. Sharing a real-time example, Jermaine disclosed the signals, evaluations, and interpretations he assessed in a pitching prospect:

This pitcher last night you could just see he didn't trust his fastball. Had a good one, above average fastball, 92, 93, got hit a couple times and it was changeup, changeup, changeup. Changeup was good – that was his out pitch – but he lived on it too much. He almost pitched backwards. To me you could see...I don't know how tough this guy is. He went away from a weapon that he had that was pretty good. That's a little bit of a key, or a sign, maybe on toughness, competitiveness.

In a similar vein, Sam painted a hypothetical pitching scenario and voiced the silent questions that surface in scouts' minds when they view pitchers' responses to competitive challenge:

Like a pitcher: you go see a pitcher, he's mowing people down all game, throws a fastball – boom, 400 feet, home run, and he comes back with a curveball. What do you get outa' that? What you get with that makeup? Now, is he afraid to throw his fastball again? Is he backed off? Is he not as tough?

Narrating a prior evaluation experience, Sam disclosed his preferred taste for competitive adaptability and his visualization of a pitching prospect's self-talk in response to surrendering a home run:

I saw Justin Verlander in a game – this is an extreme case of makeup, for me – against James Madison. A guy hits a bomb off of him. Absolute bomb. And he goes, 'oh.' It was basically a grooved fastball. The next three at bats – not a shot at hitting him. He turned it up another notch. Here you go. For me, that showed me a guy's like 'I'm not

going to let you beat me again. That's not gonna' happen. I'm going to elevate my game to another level'

Conceptually, coping is the opposite of mastery, and for Joe the quality of a prospect's coping behaviors reflect the strength of his makeup: "You've got to cope, deal with success or failure." In a more extreme sense, Sam emphasized the perpetual necessity for coping mechanisms in order to navigate the daily scrutiny of professional baseball and persist:

So, the makeup part of it, the maturity level of everything – it never stops, because this is a tough game to play. It's a game of failure. I've seen guys just walk away. 'I can't do this anymore. I'm out, I can't handle failure.' Great players.

In Wes's perspective, professional baseball is a "failure business" - not designed for ease or comfort - and the inherent distress of the game moves many prospects to resign: "It's a failure business, and it's tough. It's hot, it's sometimes cold, sometimes you gotta' guy throwin' balls you can't get to. You say, 'Oh man, I think I'll go home.' It's tough." For Gary, a prospect's coping ability reflects his acceptance and deeper understanding of baseball's statistical realities: "You know players can't understand if you fail seven times out of 10 you're still the best hitters in the game, but they can't handle it." Barney shared a similar evaluation point and he emphasized the significance of hitters who maintain their composure over time:

...if you're considered great you're going to be making seven outs out of 10, so you've got to learn how to....It can't be a roller coaster for ya', you've got to learn how to handle the good with the bad.

Wes also employed the "roller coaster" metaphor when describing what competitive adaptability in baseball is not. More specifically, adaptation to the competitive ebb and flow of baseball serves as a foundation for developing performance expertise:

It is a tough question, but I got an answer for you. To me the key to that answer is this: a guy that can handle the up's and down's and play on every day. It's up, he handles it; gets down, he handles it. He stays in the middle of the road. It's not a roller coaster. I know a lot of players, good players, one of their big problems was they couldn't handle the everyday up's and down's of it.

For Barney, composed, *competitive adaptability* predicts Major League advancement and is found in players who are exposed to professional baseball, understand the essence of the game, and demonstrate a commitment to training: "Those even-keeled kids, they've been around it, they see how it works, and they see what they need to do – those kids play in the Big Leagues."

Baseball's low percentages of success extend beyond hitting. Despite average Major League salaries exceeding four million dollars, Sam detailed the daily need for *competitive* adaptability: "You know we're asking these guys to play 162 games in 180 days and we want them to be good every day, and they're failing – most of the time, every day. How do you wake-up every day?" Sustained passion for the game typically precedes continual performance improvement. To this end, Jermaine stated that identifying a prospect's "love of the game" is indispensable when forecasting survival at the professional level: "The pro minor league, Big League season – it's a grind, and if they don't love it then when things get tough they're probably going to go the other way." In addition, Jermaine also described how love of the game fuels prospects' willingness to overcome tool deficiencies and advance through the player development system:

There's those guys that really love it. It's in their blood. They'll fight through adversity, and they'll make the best of it. And it's not always the best players that make it. It's those that can overcome those road bumps, because there's gonna be a lot of 'em, and move forward.

At a deeper level, Sam revealed that the cornerstone of coping and sustained confidence in high performing baseball players is the ability to forget - to adjust and compete with a quiet mind: "You gotta' be mentally tough, mentally mature, quality makeup guys that have short memories." More explicitly, competitive struggle and failure for Sam serves as a crossroad benchmark in his assessments of prospects' makeup maturity: "But they learn it, the good ones,

they forget very quickly and move on. The other ones it takes more time – they have to mature to it." Forgetting also represents an attitude that approximates "playing like you don't care." That is, in Barney's experience, *competitive adaptability* scorns the sentiments of others and clutches to a belief in one's Major League destination:

...I think for the most part the guys I signed who got there had a little prick in 'em, or a little selfishness or whatever. I think you gotta have a little tiny bit of that in ya'. I'm not saying it's a requirement, but I think those guys got a little prick in 'em that says, 'forget you, I'm gonna get there. I'm gonna get there.' A little chip on their shoulder. I always think a little chip can go a long way.

Sam profiled prospects with a "chip" as performers with lower-grade tools who possess an indomitable spirit to prove themselves worthy: "Then there's the guys that don't have the talent but they have toughness, the grit, the 'I'm gonna' beat ya' to death' attitude, 'I'm gonna' prove you wrong,' and they exceed their tools." In Sam's opinion, this flavor of *competitive* adaptability portrays optimal makeup because "what you want is every player to exceed their tool level." Exceeding one's tool level creates a line of separation between those who do not perform to their physical potential and those who do, and Jermaine described baseball outliers as competitors – regardless of size and strength – who adapt and find a way to succeed: "They compete. Those are the guys, they separate themselves because of that. They may not be the most talented. They may not be the biggest, strongest, but they win, they find a way to win."

Technological advances, improved training methods, and expanded performance opportunities transformed the culture of amateur baseball over time. Barney admitted his personal taste for the "gritty, dirty baseball player" – the player who loves the game, aggressively competes, and consistently finds ways to adapt and win. Barney also explained that, as amateur baseball opportunities improved, "it's harder to find these guys anymore." Whether *competitive adaptability* is less present in amateur baseball - in Barney's estimation

because "those guys are so much catered to nowadays" - is beyond the scope of this study.

However, Sam explained that, in his experience, every new minor league player begins his career with an "upside-down bell curve." That is, drafting prospects with *competitive adaptability* represents a beginning, not an endpoint, in the development of *competitive adaptability*:

Every kid we get, basically their bell curve starts the opposite way. They've never failed, so everything goes down. It goes this way. It's reversed for them. They go, 'I'm away from home. I've never taken' care of myself. I gotta' pay bills. I don't have any friends. Half my team speaks Spanish.' This kid's, 'whoa.'

Scout participants indicated that *competitive adaptability* is most clearly and completely revealed when prospects struggle or fail. This psychological attribute is particularly pivotal in establishing a foundation for the development of baseball performance expertise in light of the game's low percentages of success and the cultural and competitive challenges within the minor league system. Prospects who personify *competitive adaptability* – regardless of tool grades or size – demonstrate adaptive responses to slumps and competitive challenges in ways that reflect toughness, grit, and a personal passion for the game. Prospects with *competitive adaptability* also maintain steady effort and a quiet mind as they adopt a refined ability to "forget" and "play like they don't care" about the opinions of naysayers. Scout participants additionally acknowledged that prospects who demonstrate this trait better understand the essence of baseball and consistently exceed their tools in their on-field performances.

Extra Effort

From my participant interviews I formulated the makeup trait *extra effort*, and this construct signifies the uncommon drive and purpose scouts covet in baseball prospects. Joe noted that this type of makeup is evident in a prospect "when he can go out and be a blue collar guy, work his ass off, and get after it," and he explained the presence of *extra effort* is confirmed

when answers to the following questions are substantiated: "Do they want to work? Do they want to get better?"

Sam shared a personal analysis taken from a five day field observation that illustrated optimal work ethic and purposeful effort through baseball actions:

I don't know if this guy's ever gonna' play shortstop, that's my first impression, first day. Second day, I come out, what do I see? Who's the first player on the field? [player's name]. Now, I'd heard all the other stuff – great kid, great person, talked to our scout in [location], he loves the guy. Everybody's all in, right. And so I'm sitting there watching, and every day he has a purpose – on the field. 'This is what I'm working on today.' Five straight days of that, and he does everything you want to see in a player, in a game, in his work, in his BP work. His purpose for being on the field. That's why he's in the Big Leagues at 21 and playing exceptionally well.

From a personal scouting experience, Jermaine disclosed how he clearly "saw" *extra effort* makeup through a prospect's readiness to compete and his on-field style of play: "There's a kid I saw two years ago in the Cape Cod....You could just see the makeup in the kid because he comes ready to play every day. Runs every ball out."

In Ted's perspective, *extra effort* within the team dynamic is both "infectious" and a highly valued trait for scouts and coaches because "it lead[s] other players in wanting to do that too." Simply put, players with *extra effort* often influence other players within a team to train and compete with greater focus, intensity, and effort. To this end, Justin believes that "the above average guys have better work habits," and he attributes this to their desire and commitment "to do well with their job to be the best they can be."

In a contrasting case history, Sam framed his rationale for why the absence of *extra effort* behavior is a stimulus that can eliminate physically talented prospects from scouts' selection consideration: "'I'll take him – I want no part of the other guy.' Because he's not gonna' do the extra stuff – last one to get on the field, first one off, no purpose, no reason to be there." On the other hand, the presence of above average tools can also overly influence player selection

decisions and entice organizations to diminish their consideration of makeup in the prospect identification process. In the following narrative Sam disclosed why deficient *extra effort* – despite exceptional tools – can derail player development and divert organizations' time, money, and player development efforts in unproductive ways:

After seven years, was I right on the makeup? Yea, because he didn't work; he didn't do the other stuff. We saw that a long time ago, so we missed because we wanted to stay with the tools. Because the tools were good. I mean the tools were well above average. You go, "well, we can work with this guy." Well you can't work with laziness. You can't work with that.

The hope, because it is a learned trait, of *extra effort* development also fuels scouts' continued interest in physically talented prospects. Mack shared his projective and possibility thinking regarding a prospect who failed to change his perspective and makeup:

And I finally convinced our guys to draft him. He was the one guy in my heart of hearts that didn't really love the game – that didn't really have the passion for the game. But he had so much tools that I was hoping, at the age of 18, that maybe somebody could get hold of him and change that.

Unlike other makeup traits, scout participants predominately described *extra effort* in the negative. That is, scouts most often described *extra effort* makeup by portraying what they did not want to see in a prospect's style of play and training habits. In this light, Jermaine replayed a post-draft experience and disclosed his observational interpretation of a "new employee's" insufficient *extra effort* during the first month of employment:

[Name], [MLB Organization] GM is sitting in the seats the other night, and their first rounder hits two groundballs and runs about 80 feet, doesn't run hard through the bag, doesn't step on the bag. I'm saying to myself, 'we gave that guy a million dollars and he can't run 90 feet hard?' That's makeup. That's makeup.

Digging deeper to illustrate the differences between physical potential and *extra effort* makeup,
Wes compared two first round draft selections and highlighted the behaviors in one that betrayed
his taste for *extra effort* and prompted him to eliminate the prospect from consideration:

I've seen guys with a lot of potential. Tom Grieve's boy. 6'3", 6'4", left handed hitter, went in the first round, went before Nomar that year. I had a lot of interest in him. Now you're talking about a guy with ability potential, projection, as opposed to makeup – he didn't play the game like that. Nonchalant, just the way he perceived himself, the way he went about his business, the way – between innings, instead of running toward the dugout he stopped before he got to the dugout – all this type of stuff.

Sam paused to diagnose the dilemma of unfulfilled potential and its relationship with insufficient *extra effort*. Specifically, Sam stated effort and ability are interdependent, but effort is a learned behavior – a product of one's teaching, mentors, and environment. In this regard, Sam explained when players with "great tools" proceed through the amateur ranks and the reinforcement and accountability of effort remains underdeveloped, then prospects' baseball potential is often unfulfilled:

So that guy with the great tools goes through high school without anybody telling him anything. Never learns the value of effort. Then he goes to college, same thing. Then he signs pro ball and everybody says 'go play.' Nobody's ever made him accountable. It goes back to that 'hey, this guy's got potential. Great potential.' But we didn't teach him the right way.

Independently, Wes characterized baseball prospects with unfulfilled potential as lacking true understanding of their occupational role and the decisiveness required to attain performance expertise: "They don't get it, they don't feel a sense of urgency, a sense to excel, a sense to achieve. They don't get it." However, and in contrast to Wes, Sam found fault for unfulfilled potential in physically talented prospects often resides with coaches and support systems. Specifically, Sam explained that players with "great talent" are often not pushed "to their potential enough" because "they're better than everybody else" and "they've been getting away with it so long," and as result "they don't get there." Indirectly, Sam questioned the deeper understanding of those who hold leadership roles in amateur and professional baseball: "So, you want the guy with great talent, who's born with it, to exceed his tool level. Not just 'I got these tools, they're great'."

While Sam described ineffective learning, Wes saw incomplete understanding, and Mack insufficient passion for the game as impediments to *extra effort*, Barney highlighted the prevalence of distractions and his belief that physical talent is typically not the principal road block to Major League advancement:

There are reasons why only four guys out of a hundred make it to the Big Leagues. It ain't talent....It's what have they done to let something distract them from, as I say, getting off that Interstate. What have they done to make them get off that path?

Jermaine reinforced the conclusion that physical talent is required to play in the Major Leagues but in itself is insufficient: "Talent will only take you so far, and to me it's those guys with makeup that get to the Big Leagues." For Jermaine, this confidence in makeup as a catalyst is born of personal experience:

I was good, but I would never have got there I think if I didn't have the passion and the drive and the determination to do the extra things, do the extra workouts, to fight through adversity. Because there were a number of times I had bad games that I coulda jumped off a building, ended it. I just don't wanna do this anymore. It's just too tough. But that's makeup to me. You're gonna fight through that adversity, work your tail off trying to get there.

For Joe, "getting there" is a byproduct of a prospect's acceptance of criticism, performance adjustments, and improved performances: "You gotta' be coachable, teachable, and they gotta' be able to put it into action. If you can't put it into action it doesn't mean much."

Mack identified *extra effort* as a "certain pride" that is visually recognized "by guys getting to the park early, guys working extra, guys staying later." This "pride" for Justin means "you have something you want to get better at," and Ted pointedly stated, "Pride. That's makeup there. That's a completely different makeup."

Upon signing, Wes described the type of unwritten behavioral contract of commitment he desires from each player. In brief, Wes views the employment relationship as a pledge to work, develop, and produce:

...when I sign a player and I commit to him, I want him to commit to me. If I give him a million dollars – I don't care what I give him – I want you to give me something back. I want the work ethic. I want the commitment. I want you to try to be something. I want you to try to produce. I want you to give it to me.

However, Mack characterized "kids nowadays" as embodying a sense of entitlement and a lack of desire to "work at it." Ted commented that today's prospects, in a general sense, "don't want to have anything to do with extra," and Sam depicted this challenge faced by scouts as a lack of prospects' desire to "put in the extra work" and a byproduct of the presence of "too many other things to distract them." For Barney, the end sum is his realization that *extra effort* makeup is more difficult to find in current times: "So I think our game in a lot of ways it's getting harder and harder to find talent."

Scout participants most frequently described the makeup trait *extra effort* by disclosing the deficiencies they did not want to see in prospects' work ethic, sense of pride, and decisive purpose for training and competing in baseball. A shortage of this attribute can move scouts to eliminate prospects from draft consideration, and participants correlated unfulfilled potential with ineffective learning, incomplete understanding, and insufficient passion. To this end, scouts underscored the number of distractions today's players face and the diminished presence of *extra effort* makeup identified among prospects.

Instinct and Intellect

Joe emphasized that talent development leading to baseball performance expertise ultimately "boils down" to a prospect's "ability to internalize and play the game. It really does. It really does. It comes down to that." Internalizing the game – or, specifically, *instinct and intellect* – represents the third valued makeup trait synthesized from scout participants' descriptive disclosures. *Instinct and intellect* in this circumstance refers to baseball prospects' understanding and feel for their performances within the speed and the context of the game. For

Barney, the consummate career Major League prospect embodies baseline tools but advanced baseball *instinct and intellect*: "The ideal guy for me is the guy with some tools but more baseball player in him. There are the guys for me that play 10 years in the Major Leagues." In turn, Sam disclosed that scouts infrequently "talk about the intelligence of players" because they implicitly understand all Major League players are smart, but he defined "smart" in this way: "I'm talking about game smart IQ guys that really, really know what they're doing on the field."

Scouts often use the word "feel" when referring to prospects who "know what they're doing on the field," and Bart described how the absence of feel (baseball *instinct and intellect*) is manifested when scouts observe prospects' underdeveloped perceptual cues and performance monitoring abilities:

A feel – a guy can really run, but he can't steal bases. He's got strength, but throws to the wrong base all the time. Breaking ball – he stands in there, he's got tremendous bat speed, but he sees a breaking ball and he doesn't recognize it. It's like this, and he freezes. He does not recognize spin. He's got tremendous bat speed and in BP he's launching balls 400 feet. The Christmas package the way it's wrapped really looks good, but when you open it it's not what you wanted.

In a phrase, the *physicality and tools* are good, but the prospect does not know how to "think baseball" with his movements, or, in Bart's words: "Sometimes you see guys with tools, but they can't play." Mack described this type of prospect as a "carnival guy," or, more specifically, a physically impressive prospect with above average tools whose game performances fail to consistently advance his team's opportunities to win. As an illustration, Joe provided an example of exceptional tools and makeup minus the presence of baseball *instinct and intellect*, and he implied that this deficiency impedes the full development of physical potential:

Plus profile. Big Leaguer. No pot holes. Went in the second round, gave him \$750,000.... Yea, six years later he's at the University of [name of school] working on his degree. Just didn't want to play the game, didn't have the instincts for it, couldn't make an adjustment.

This draft selection remained an enigma for Joe, a personal case example who reminded him of the critical importance of baseball *instinct and intellect*:

But he had the body, boy. So, but – he just didn't know how to, he made adjustments but didn't internalize 'em, synthesize. Whatever it was, he just couldn't play. He had every tool in the world, he just could not play the game.

Wes also emphasized that the talent (tools) account does not guarantee the presence of baseball *instinct and intellect* in a prospect:

I'm tellin ya' from experience, man. I've signed a lot of guys that didn't make it, had a lot of ability. Lot of ability. They just don't have it up here, man, it just didn't jive. It just didn't register to 'em...they don't perceive it.

In contrast to the examples above, Mack depicted a prospect with optimal *instinct and intellect* as a player who understands both how and when to elevate and/or adapt his performance based on the game's competitive demands:

But for me, I think the story that I told you about watching a high school kid the other day, and seeing that with guys on second and third he's averaging 86, 87, and goes back and gets 90. That for me is the essence of a guy's makeup and having an inner desire or ability to, when needed, go back and show ya' a little bit more. The idea of 'how does this kid perform when the game's on the line or in the clutch?'

In keeping with Mack's example, Jermaine defined baseball *instinct and intellect* through the filter of the following question: "can you take what's in here and use what you've got?" That is, *instinct and intellect* are demonstrated when prospects find ways to succeed at baseball at the right time. Along similar lines, Sam gave an account of a scouting observation when a highly-rated prospect chose the right time to use what he had in reserve:

He's pitching good, groundballs, he's pitching clean, everything's great. No stuff. I'm saying, 'I need to see the stuff, at least one inning of stuff.' The man gets on second – 92, 93, bastard breaking ball, the next four innings. Okay, that's all I need. So, if I woulda' stopped and went off what I saw early....I go, 'okay, what's he thinking? Where was the kid at? What was going on?' Hey, I need to make a call. Their area guy goes, 'I think he was just a little tired. He wasn't trying to pitch with his great stuff. He knew he had another game to pitch next week, and he was kinda' conserving his energy.'

A prospect's feel for the game assumedly reflects the performance monitoring and perceptual cues born from the depth and the quality of his deliberate practice. Said differently, Jermaine emphasized the importance of discovering a prospect's grasp and comprehension of baseball: "That's where makeup again is so important – that you find out is this guy really a baseball rat? Does he watch baseball? Does he understand the game a little bit?"

Sam correlated prospects' progression time to the Major Leagues with their comprehension (*instinct and intellect*) of the game within their arsenal of baseball tools. He explained that the great players arrive in the Major Leagues at the age of 21 years because: "They get it. They understand it. And the college players too, a year, a year and a half and they're in the Big Leagues – the great ones." However, Sam also emphasized the importance of "time and patience" in scouts' talent identification judgments because: "The rest of them, it's three years in the minor leagues, five years in the minor leagues, seven years in the minor leagues before they get it."

"Getting it" is not guaranteed, and Sam's narrative underscored the interdependency of physical and psychological performance attributes. Posed as a question, how do scouts identify the prospects who have the capability to "play by feel" in the speed and flow of competition at the highest level of baseball performance? Prospects with *instinct and intellect* understand how to analyze the game's fundamental elements – in part and in whole – and accomplish expertise. For Joe, prospects with baseball *intellect and instinct* know how to analyze, synthesize, and execute: "if a guy can't internalize what we're saying to him – he can't put it back out. He's got to be able to analyze it; he's got to be able to synthesize; he's got to be able to go out on the field."

Scout participants described baseball *instinct and intellect* as an understanding and feel for performance within the speed and context of the game. Prospects with baseball *instinct and intellect* know how and when to elevate and/or adapt their performances, and comprehension of the game typically foretells the speed of a prospect's developmental progression to the Major Leagues. In turn, a prospect's "ability to internalize and play the game" does not necessarily correlate with the strength of his tool grades, and the absence of this makeup trait impedes the development of full potential and reflects a diminished progression of perceptual cues and performance monitoring.

Projecting Expert Performers

I now turn to the fourth theme emanating from my research, projecting expert performers. Field observation and prospect research represent the first two stages professional baseball scouts employ to identify physical and psychological talent in prospects. The third stage of prospect talent identification – expert performance projection – integrates the two initial stages to evaluate prospects' potential for talent development leading to performance expertise. That is, expert performance projection precedes player selection and attempts to forecast the probability of prospects' advancement to the Major Leagues across a three-part decision matrix consisting of: (1) fit and readiness for rigor; (2) time to develop; and, (3) tools and makeup composite.

Fit and Readiness for Rigor

Scout participants described organizational fit and prospect readiness for the rigors of professional baseball as pivotal predictive factors that influence draft selection and talent development. Bart described newly drafted prospects first exposure to minor league baseball as an "awakening," and Sam emphasized that "some kids don't thrive in each environment." Wes stressed "a lot of players don't know what they're getting into," and Barry described the

opportunity to sign professionally as a behavioral crossroad for some prospects: "My limited research has shown me when they sign they tend to know that's their last chance to make it, and whatever problems they had off the field seem to go away a little bit."

In Sam's experience organizational fit represents a byproduct of prospect research and not solely a result of survival of the fittest and contractual leverage: "It's not just, 'well, we gotta' always get the players in, and we'll make 'em fit.' No. That's not how it works." For Justin, fit extends to draft room decision-making and should reflect a selfless regard for the overall strength of the organization's draft selections: "We're going to draft 40 guys. If I don't get one, but if everyone out there fits better, is better than my guy, that's good." Sam outlined the components of organizational fit with a multi-level question: "You know, does this guy have all the core beliefs, all the core things we look for, on the field, off the field, that fit what we do?"

Sam's multi-level question resembles the queries often posed by hiring committees across a spectrum of professions. However, most professional baseball players begin their careers as draft selections – not as free agents – and, unlike other businesses, a baseball prospect's employer is subject to lottery selection, not individual choice. In this perspective, Wes confessed that he is "not solely convinced everyone should sign," yet in Justin's experience and contrary to his convictions: "someone's gonna' give 'em the money to buy 'em out when probably either physically or mentally they're not prepared to go out."

Justin's prescription for player readiness begins with determining baseline tools and makeup, projecting the prospect's future developmental potential, and casting aside first-year expectations:

He doesn't have to lead the league in hitting, he don't have to lead the league in something, but he's gotta be able to survive right now with what he's got even though

you know three to five years down the road the size he has there's gonna be more strength.

Sam echoed a similar approach to first-year player persistence – "Just get through it. I'm not looking at your stats." More specifically, Sam pointed to the importance of player adjustments to procedural, teaching, and environmental changes: "Understand how it's done, how we do things, and playing every day. It's different, even for a college player. It's different."

Sam's strategy for clarifying prospect perspectives and determining readiness for rigor focused on home interviews. Sam likened these meetings to "job interviews" that communicate "real life," and he shared how his questioning presentation transformed as he matured as a scout. That is, instead of communicating the excitement, money, and prestige associated with becoming a Major League baseball player, he learned to intensify the conversation and ask direct questions focused on the employer-employee relationship to outline the significance of impending life change:

It's still alota' money, so you have to be able to ask tough questions, make them nervous, make them all nervous – mom and dad nervous – and then you have to go say 'hey, this is a job interview. You're going to be working as an employee. You're going to be paid by us. We're going to be doing your insurance, doing everything', and mom and dad are going 'oh, we didn't think about that'.

Justin's questioning begins with the acceptance that "they're not all playing in the Big Leagues," and he concentrates on forecasting a prospect's understanding of the life changes that begin with signing professionally:

Can they do their own laundry? Can they cook? Can they leave a small town? Can they leave their friends? Can they leave their girlfriend? That's always a very important thing, but I think they've got to be mentally and physically prepared to go out into the world on their own, and all of 'ems not.

Sam also disclosed that prospect responses and reactions to this tone of questioning provide him with an indication of their readiness and resolve - or their unpreparedness and indecision:

So, when you sit there and talk to kids and give them real life, 'hey, this is a job. You're a professional. Yea, it's great when you get to the Big Leagues, but there are steps you're gonna' have to go through to get there. Are you ready to do that?' The kids that sit back in the seat and do this, I don't want no part of that. Because he's not ready to go. The guy that sits on the edge of his seat, and he's locked into me, and I'm locked into him, that's the guy that I want. Subtle things that you notice, but that takes time as a scout to learn it.

For Barry, prospect readiness is simply a direct statement that communicates personal desire to begin a professional career: "I'm gonna sign, draft me." Compared to a calculated process of "signability" negotiations, Barry explained that, in his experiences, prospects who communicate a clear willingness to sign "are the ones that usually end up doing pretty good. That's kind of the last piece of the puzzle for me for makeup." In the end, projecting a prospect's fit and readiness for rigor begins with the belief that "sometimes the best signs are the guys you don't sign" (Sam).

Potential employee pools associated with lottery selection are unpredictable, but despite the breadth of this challenge scout participants emphasized the importance of forecasting prospects' organizational fit and readiness for rigor. Once drafted, prospects' occupational mobility is constrained, and leveraging fit requires less effort than discerning fit interpersonally. In turn, all MLB organizational cultures and player development processes are unique, and the determination of "good fit" potentially accelerates player retention and the realization of performance expertise. Minor league baseball is an "awakening" for most first year professionals, and scout participants underscored the importance of uncovering and informing prospects' understanding with regard to the impending life changes associated with living away

from home as a professional baseball player. In the end, scouts attempt to project prospects' readiness, fit, and resolve to pursue a professional baseball career, and, done effectively, scouts accept the notion that not all prospects should sign, not all prospects are fully prepared to survive minor league life, and good scouting is also measured by those prospects scouts refuse to sign.

Time to Develop

The second step in scouts' performance projection matrix is "time to develop" – specifically, how scouts factor and weigh developmental time when forecasting prospects' potential for achieving performance expertise in two to five years. To this end, time to develop is a decision-making component viewed through the lens of timelines and schedules.

With regard to timelines, Mack exclaimed that "we're in such a hurry to do everything now," and he explained this haste results from the speed of information and cross-checkers' desire to assemble their lists and visually evaluate prospects as quickly as possible. To that end, Mack queried, "But, are you really seeing?" More specifically, Mack implied that a "time to develop" perspective needs to be more firmly applied to cross-checkers' evaluation lens:

But you know what? You go in there – I saw this kid pitch the other day. He was 84 to 87, but he went back and got an 89. Now, he's 6'5", and he's 175, and there's a lot of room to fill out. The arm works, and he can spin a breaking ball.

The assumption of Mack's message is futuristic and projective: that is, if 89 is the current limit of the prospect's capability, but in four months of development, conditioning, and good weather 89 becomes the lower limit of a velocity range extending to 92 – when does a scout's evaluation rest on a static measure and when does one embrace increased performance development over time? Joe detailed his questioning self-talk when he observed a prospect's positive tools and attempted to visualize the player's future hitting power:

You've seen that kid hit a ball that jumped into the gap, and you're like 'you know what? Two years, three years, or a year – what's he gonna' be like? With more strength, more

bat speed – is that ball gonna' jump into the gap and hit the wall? Is it gonna' go outta' the ball park?'

Along these lines, Jermaine devised a "non-static grade" for those players who need more time to develop before draft selection. He adapts his evaluations and categorizes these prospects as "follows," or, more specifically, players he will continue to observe over time because signs of potential professional tools and makeup are present. In a phrase, a static tools and makeup grade is incomplete when forecasting "time to develop".

I don't like it when I go Tournament of Stars you're putting NP's on guys, non-prospects. These are the hundred best high school guys in the country. They're gonna play college baseball. I 'CP' 'em – I put college player on 'em. They may not be a pro guy right now, but three years down the road what are they gonna be?

In order to project expert performance, scouts must wrestle with the determinants of potential performance and then compare these results with the determinants of prospects' current performances. Jermaine provided a reminder that talent development occurs on individual timelines: "Some guys are late developers; some guys are early developers." Said differently, Sam emphasized that leadership is required to identify positive tools and makeup forecasted against development as a function of time: "It takes a player, a scout, a coach to go 'time to go to work. There's things to like. Let's go.' Because every kid has his own growing path." Growing path in this context is synonymous with time to develop, and although performance prediction is the foremost goal of talent identification, predicting baseball expertise is the most difficult and uncertain objective scouts face:

Everybody...like I said, the one guy might be a great player at 25, the other guy might be a great player at 21, another guy might be a great player at 28. So, the hard part for us is trying to figure out who they are, those players (Sam).

In sum, Sam petitioned "don't give up on players;" he revealed that "sometimes we do it [give up on players] too quickly;" and he acknowledged that today's prospects "have it a little easier."

Deeper still, Sam championed the concept of time to develop as both an organizational charge and a perpetual pursuit inherent within performance expertise:

Okay, this game's not for everybody, so we have to continue to develop the player, the mind, the person – all the time. You can't stop. You can't go 'we gave him four million dollars, he's good.' No, he's not good. There's stuff going on. So, if we do that and scouts do their part, and player development does their part, front office does their part, then we have a chance.

Time to develop also includes downsides. For example, Joe disclosed a conversation with his organization's President regarding a player with poor makeup, and, in Joe's evaluation of the prospect, "there's not any better talent we're gonna' find."

...and [Organization's President] says 'we can't give enough time to that kid. He would take away from all the other kids because he would take too much energy.' I thought that was really insightful. [Name], you know him being the President of the company, just hearing the conversation, him saying 'you know what, we can't bite on this guy because he would take too much energy from our staff, and it would hurt the organization in the long run.'

In this case, time to develop projected to require time and resources beyond what an organization was prepared to provide for one prospect. On the other hand, Sam pointed to professional baseball's mission "to grow kids up," and he insisted "we don't do that enough". Sam shared a general example to illustrate his appeal to "keep working with kids":

We take a Latin kid 16 years old. We take 'em outa' their country. We bring 'em over here. The kid's not very talkative. He doesn't know English. We gotta' teach him English, and they go 'he's not a great makeup kid.' Well, if you're 16 years old, living in a new country, doesn't know how to speak the language, I don't even know how you can even come up with makeup. How do you do it?

At a deeper level, Sam associated time to develop with the depth of a prospect's upside-down bell curve – that is, the time required to psychologically adapt to the rigors of professional baseball is a pivotal consideration in each prospect's time to develop.

Some guys don't have a very deep upside-down bell curve. Some guys do. So we have to figure out how to work through that, and in that process we've got to start building that kid up, for the makeup – it's there, it's good, now we gotta' get the rest of it outta' him.

The zeal to identify and sign players can also interrupt the time needed to develop good decisions. Sam confessed that scouts need to practice patience when evaluating prospects: "So, sometimes we have such urgency, 'I wanna' sign this guy, sign this guy,' and we miss something." In Sam's viewpoint, practicing patience in this context requires restraining the drive to comprehensively see everything in one day and instead allow prospects' performances to unfold at their natural pace of development:

But some guys, they want to push it. You know, it's like I tell young scouts – young pro scouts, young amateur scouts – they go to the ballpark and they go 'I gotta' see everything.' That makes you tired, one, because you can't see it all. Sometimes you gotta' let it come to you, and then when it comes to you, you gotta' go 'I got it.'

Time to develop represents scouts' most important and difficult responsibility – specifically, scouts are called upon to project what type of player a prospect will become in two to five years. In itself, time to develop forecasting is laden with questioning dilemmas: are we really seeing? Did we allow the performance to "come to us"? At what point do we base our evaluation on a static measure? In effect, projecting expert baseball performance weighs the determinants of a prospect's current capabilities against the forecasted determinants of his future development within the understanding that each player has "his own growing path".

Tools and Makeup Composite

The final step in scouts' performance projection matrix is labeled "tools and makeup composite," and this phrase represents scouts' integrated estimations of prospects' physical and psychological potential for performance expertise. In effect, tools and makeup composite describes the self-reflective acid tests scouts individually conduct to produce their prospect projections.

Tools and makeup composite initially frames a dichotomy between prospects' current and their yet unknown future performances. Barney described the judgment process as a "fine line" and characterized the end result as "a combination, you gotta' use all your resources to come to a decision." For several scout participants, the fulcrum for "use[ing] all your resources" to make prospect judgments turns on the practice of asking questions of self. This selfquestioning critically analyzes the ground truth of scouts' prospect observations. For Sam, questions to determine passion and commitment prevail: "I think we work too hard to find makeup early instead of just going 'does he play hard? Does he love to play? Does he have intelligence to play?" Sam's initial focus on prospects' "style of play" compared with Mack's avenue for justifying passion and commitment: "And I think it comes down to the work ethic, I think it comes down to the body language, and I really think it comes down to 'does this kid really enjoy playing the game?" For Justin the combined strength of prospects' physical tools and mental preparation are non-negotiable. However, Justin also emphasized the importance of determining prospects' deeper motivations for signing professionally: "...and you're not signing for the money – you're signing for the love of the game." Said differently, Wes's inclinations are also to sign the "composite" prospect package of tools and makeup: "I'd rather have a guy with less ability and makeup than a guy with a lot of ability and no makeup." In similar instances, Mack's question to self is designed to forecast player improvement: "And if you're a little short with a tool, do you have the makeup to, you know, to overcome that?" Further explaining, Mack sees no "substitute for tools," acknowledges that great tools do not imply great makeup, but, in large measure, Mack seeks to identify prospects' degrees of performance improvement across observations: "I think a lot of it goes back to how you saw this guy before, and is he different than what you saw before?"

A decision-making dilemma surfaces when a prospect's tools significantly exceed the maturity of his makeup. That is, the presence of above average tools, particularly combined with above average height, often surpass the importance of makeup in scouts' decision-making matrix. For Jermaine, this prospect profile – with average to below average makeup – professionally advances and survives: "The guy with all the big tools and the big body, the makeup can be average, below average. He's gonna' get to that level because of that body and those tools." Fundamentally, scouts' decision-making begins with the imperative of average tools, or, as Manny declared: "If they don't have an average tool they're not going to get drafted. You're not going into the minor leagues." However, Sam acknowledged makeup accountability for above average tool players in scouting culture comes with greater permission: "And the extreme tooled-up guy who can really play, he does get a little bit of a pass."

From a draft room perspective, Jermaine illustrated scouts' tendency to pardon makeup and give judgment priority to tools and size: "It's amazing when you break down or have your draft meeting. 'How big's this guy? What's his tools?' You talk about makeup, but it sometimes gets overlooked. It's sad, but it gets overlooked." In lieu of overlooked, Sam implied that makeup is often deferred in the presence of great tools: "You know if you got great tools you can have bad makeup, if you got great tools. Because the guys go 'hey, just run him out there, let him play, we'll deal with it'." In sum, scout participants described a step-wise decision matrix that, in descending order, most values tools and size in the higher draft rounds, and as tools and size decrease in later round selections makeup is more highly valued. Sam explained, "if you're an average player you can't have bad makeup," and, Jermaine described late round draft choices as below average tools with above average makeup: "and then you get to the bottom end of it the guy's below average tools and got great makeup."

Later round draft selections who become good players represent, in Jermaine's perspective, the litmus test to "determine the guys who can scout." That is, top prospects are evident to all and limited in number, but the genius of scouting in Jermaine's estimation is seen in scouts who consistently identify: "Who are the guys that are in-between, that are gonna' be really good players? That's where the little things come into play again." For Mack, scouts identify the "little things" when they answer the question: "What does this kid have that can help us win?" Winning – or individually succeeding – in baseball comes with low percentages of attainment, and Barney described how this reality forces scouts to ask questions of self when projecting prospects' tools and makeup composite:

Baseball's the type of game where you can come in and see a kid one day and he can be fantastic, and the next day he strikes out four times. So whata' you got? Which one do you have? Do you have the great player or the guy that didn't make contact today?

Observing tools in the absence of baseball skill execution prompts scouts to ask the question: "do you have the great player?" Reinforced and described in a different way, Jermaine outlined the learning-centered and psychological ability questions he asks of himself in these situations:

...but the guy that's throwing 92 that can't get anybody out, or the guy that's a 6.4 runner that can't steal bases – why? Why can't they do that? Is it something internally – internal clock? Do they have that fear of failure as opposed to "okay, I'm gonna steal some bases, I'm gonna be thrown out, but I'm gonna be successful enough"?

In assessing tools and makeup composite, two principles prevail for Sam: (1) "evaluate the situation;" and, (2) visualize a prospect's development as a consequence of his makeup. Evaluating the situation requires a view from above – in Sam's description: "So, sometimes we have to step back, and it's all right in front of us like I said before, it's all there." Stepping back signifies a pause, a self-reflection, an opportunity to objectively evaluate the prospect, and the result, in Sam's viewpoint, ensures "we have a better grasp of what we're getting, what we're bringing in." Secondly, scouts' most difficult task in projecting tools and makeup composite is,

as Sam detailed, justifying future performance expertise as a consequence of tools and makeup: "this guy can do it because he has this makeup. He can handle failures. He can do all these things." Described differently, Manny believes ascertaining makeup correlates with the frequency of prospect engagement: "what I determined was the only way you can determine makeup is to be around them more than anybody else." Comparatively, Joe is confident building prospect relationships is the route to identify attributes of deliberate practice: "So that's why the personal relationships we build with the players is important – so you know what kind of desire they have." In the end, quantitative measures, in Manny's outlook, only encapsulate a portion of expert performance projection:

You're gonna' have these numbers and all these things you can point to that may be a tipping point whether you take a guy or don't take a guy, but you're still going to have to see a guy. You're still going to have to find out.

As scouts approach their decision threshold on prospects, Sam confessed: "a tipping point for me is just not to fail." A veteran of nearly 30 seasons, Sam transparently confessed: "there's still guys I miss. I go 'how did I miss that? What did I miss?" Sam also explained that sometimes we do not have opportunity to view or we do not fully absorb key indicators of prospect talent: "Sometimes you don't see it, but you gotta' ask the question, 'what did I miss? What did I not see?" While "not wanting to fail" drives Sam to consistently ask himself – "Why does this guy have the ability to be good?" – Bart underscored the critical importance of making timely, definitive decisions, even if they later prove to be wrong: "What do you think? – Tell them. Don't ride the fence, they'd rather you be wrong than ride the fence." For Barry, uncertainty is a signal to eliminate a prospect: "if you're on the fence you should probably back off and let somebody else take him." In related terms, Sam alluded to the relevance of decision-making instinct and timing. Makeup can be indiscriminate and inconclusive despite our best

research efforts. Occasionally makeup circumstantially unfolds before us; periodically, makeup is realized at the crossroad of minor league life: "Then you gotta' go, and sometimes makeup comes to you, sometimes after you sign a guy – it's not before."

Projecting expert performers starts with spending most of your time with the prospects you most desire and have the best opportunity to draft and sign. In Sam's definition, basic scouting boils down to determining: "Who do you really want? Make sure you know those guys. Make sure you do your work." For today's scouts, Jeb stated the observation and analysis involved in making player projections are increasingly comprehensive and quantitative – requiring richer textural descriptions of tools and makeup and the statistical validation of game intelligence:

It used to be strengths and weaknesses, a little physical description, and it's changed over the years now. Now it's about on base percentage, and how his approach is. Does he take pitches? Does he have a plan at the plate?

In this vein, hitting a baseball is often referred to as one of the most difficult of all sport skills, and several scout participants also underscored the overwhelming importance of identifying hitting talent. In brief and for some scouts, hitters with strong tools and makeup composites have draft selection preference. Joe revealed, "number one, it's gonna' be the hit guy," or, more explicitly: "So, but if you can hit, and he's got makeup – the will, the desire to do it – he's gonna' go above that guy on the list that I thought 'I don't know if he's gonna' hit'. That guy goes above." For Jeb, tools and makeup composite for hitters represents a case study projection that hinges on the strength of the prospect's makeup:

So, you kind of look at it like – here's the best case: the kid can lose ten to fifteen pounds, lean up, trim up, get some more mobility, he could be what I think he is. Now, if he doesn't have the work ethic and makeup and family background and all that good stuff that goes into who the kid is, he may not reach his ceiling.

Jeb's case example illustrated draft selection potential contingent upon a prospect's makeup capacity for talent development. Manny also emphasized two convictions specific to projecting hitting prospects: (1) consistent hitters advance to the Major Leagues; and, (2) makeup determines hitting prowess and supersedes swing fundamentals.

You've still gotta' figure it out – this guy's gonna hit. Why's he gonna' hit? Because he can hit. He's gonna' hit because he can hit. And that will – if he stays healthy – that will move him to the Major Leagues if somebody can hit, okay? To say somebody's not gonna' hit, I've been burned on that one before. You say, 'well, this guy's never gonna' hit. He's too long. He's too this, too that.' Again, it goes back to makeup. It goes back to what their background is. Work ethic, what he has done in the past. All those things determine if somebody's going to hit.

In contrast, Sam described a case example of above average tools, deficient ambition, and elimination from draft consideration:

And you start watching the kid and see some things: you didn't see love, you didn't see passion for the game. He was just a tooled-up guy that played. So for me, I go, 'I'm out.' I don't want that guy.

In this case, absent makeup created talent development doubt in the presence of above average tools.

Tools and makeup composite challenges scouts to use all their resources to project expert performers, and the prevailing acid test scouts employ is questions of self. More clearly, scout participants focused on prospects' style of play, love of the game, and game intelligence. While "good" makeup is optimal, the tendencies of scouts' reveals that it is not always required – or rather, it is overlooked or deferred – in the presence of above average tools. In contrast, scouting "genius" is bestowed upon those who pay attention to the "little things" and consistently identify prospects that are "in-between." In-between in this context describes prospects who will achieve future performance expertise when that reality is not clearly observed in their present performances. In the end, tools and makeup composite occurs when scouts "step back" and

critically analyze the ground truth of their prospect observations and relationships. Done well, tools and makeup composite evaluates each prospect's situation and projects talent development and performance expertise as a consequence of the integration of tools and makeup. I now turn to player selection, the fifth theme that surfaced in my study.

Player Selection

The First Year Player Draft concludes an annual decision-making process – by lottery selection – when 30 MLB franchises choose prospects in an effort to increase their yield of Major League players and more solidly position their organizations for long-term competitive success. This talent identification operation rests heavily on area scouts – those who work remotely with limited local oversight to identify, research, project, and assemble a "draft list" from within their respective geographical territories. In turn, "player selection" represents the final stage of the taste for talent progression among professional baseball scouts, and, at the area scout level, this stage is comprised of two elements: (1) information gathering; and, (2) the influence of guess, gut, and instinct.

Information Gathering

The process of how professional baseball scouts identify tools, define player attributes, and make decisions to identify or eliminate prospects is lengthy, arduous, and characterized by perpetual assessment activity. In describing the final stage of this process – player selection – a majority of veteran scout participants portrayed the effects of organizational change, the heightened emphasis on prospect information gathering, an experiential divide within today's scouting departments, and an inclination for doubt and a loss of empowerment. In a lengthy disclosure, Manny described how these factors over time challenged his personal sense of mission and purpose within the framework of making player selections:

...because I really felt why I got out of it...why I got outta' scouting the first time – I backed into it the second time – I felt like I was sitting in my car and just driving my life away, and that all the information I had I was giving it to the team I was working for – but I wasn't making an impact. You know? I wasn't...the impact that I wanted to make. I wasn't...even as a cross-checker – I cross-checked for my last year – even in the draft room – because I'd been in the draft room a bunch – I really didn't have a whole....The only way you really have a say is if you're the scouting director or the owner. That's really only when you have a say who you're taking, who you want, who you're going to get. So that was a little bit frustrating, but I think the biggest thing was I really just felt like I spent my whole life in the car. You know, driving, driving, from field, to field, to field. I mean, I'd sit there and think about the game. I'd think about how I do things, but I really didn't have a chance to get it out.

Jeb described MLB organizational change today as a movement toward formal business practices, a "highly educated GM," and a climate where "presidents of the ball club get involved with the draft": "It's no longer the baseball people that played, coached, that didn't make it as players like it used to be." Jermaine depicted this change as "hard," and he conveyed a lack of confidence in the quality of player assessment among today's young scouts: "...so many clubs hiring young guys who didn't play, didn't coach, office guys that are going out evaluating, and they're missing a lot that's important." Wes conveyed similar doubt and disconnect with today's young scouts and candidly opinioned: "there's a lot scouts today that shouldn't be scouting. They're not baseball people, man." Baseball people for Wes symbolize a lifelong commitment and calling to working in the game, and he questioned the sense of mission within new scouting personnel: "I do not think a lot of these guys have the same passion, commitment, sense of urgency, desire, and they're taking a job looking for something else."

For Ted, today's beginning scouts lack a depth of visual knowledge and *comparative* recall: "They're using a young group and these guys haven't seen a decade-long group of players come through." Frame of reference represents a non-negotiable fundamental absolute for Barney, and he rests his hope of on-going employability on this conviction: "They have no

reference. They have no reference. Hopefully that's why they'll keep guys like us around because you have to have that."

MLB organizations incur high talent identification and development costs coupled with low odds of prospect advancement, and structural changes within organizations reflect an intensified philosophical commitment to information gathering and empirical decision making. This philosophical change altered the performance expectations of area scouts, diffused their decision making impact, and tempered their emotional investment in the talent identification process. For Manny, this paradigm shift toward increased information gathering helps crosscheckers and scouting supervisors "quantify" and "feel better about their decision." Jermaine views the role of area scouts today as "information gatherers" who provide a data pool for the "higher up's" to make decisions based on statistical analysis: "All we're doing is providing them with as much information as possible." For Ted, these management alterations reinforce an over-focus on quantifiable measurements, not all of which lead to good decisions: "They're throwing 95, and what's happened is they're using these gun times, and it's guys throwing 95, but these guys throwing 95 are getting hit hard." The end result for Manny is a diminished voice and emotional distancing for area scouts in player selection decisions: "I really think it's changed where you really don't have that much emotion because you're just an information gatherer as an area scout."

Area scouts find the players, conduct the research, and their draft list represents the product of their seasonal work. In effect, area scouts serve as field researchers and recommending buyers for the best future performers in their geographical areas. However, the First Year Player Draft unfolds by lottery selection with front office personnel making the final

selection decisions. This process prompts some scouts to speculate about the substance and rationale of their organization's final choices:

As area scouts we don't make those final decisions, so you wonder on the other side of it, when this guy's tools across the board are 50's, do we take that guy because he's got great makeup in the 15th round as opposed to taking that guy that's got 55's across the board whose makeup is a little shaky in the seventh or eighth round?

Jermaine's reflections above question the decision weights organizations ascribe both to tools and to makeup. Specifically, when tools are average or better does an organization value stronger makeup or higher tool grades – both of which are subjective measures of taste. In Jermaine's experiences, tools receive the higher preference: "It's always, 'can he play?" If he can play the makeup part will take care of itself somehow. That's scary – especially when we're talking millions of dollars."

Area scouts' speculative uncertainty "on the other side" of their organization's decision making process potentially taints the integrity of the draft lists they submit. Ted stated that area scouts have to "hustle" to get players, specifically: "He's putting' in a lot of players, and if you put in too many that aint' the way it's supposed to be done, but that's what guys will do to get players." Stated differently, Justin shared similar experiences: "But I see a lot of guys that they want to get eight to 10 guys regardless if they like 'em or not." Deeper still, Ted claimed, in some organizations, area scouts' diminished voice and draft selection empowerment invites evaluation fraud: "...the amateur scout has to lie to get players. He's got to build his players up." From a different organizational perspective, Wes also underscored the presence of this unintended trend:

I'm under the impression that a lot of 'em don't want to do the work. Some of 'em may not do the work. That doesn't mean that we don't spend time trying to find out, but sometimes – and I hate to admit this – some area scouts don't tell the truth.

On the other hand, Justin testified that his personal approach is "don't be selfish, don't just want numbers." Rather, Justin adopts a strategic approach to the selection strength of his draft list: "But out of my fifty guys, there's probably five that will fit." In addition, although Justin embraces an organizational teamwork approach to draft selections, he is also cognizant of the presence of *narrow focused* scouts within organizations:

If I get three it's outstanding, but when we start talking about another player and if I'm listening to that player and know my player, if I think their player's better I say that player's better. But everyone is not on the same page as that. There's a lot of selfish people in the world when it comes to players.

Scout participants described their roles as information gatherers within franchises that increasingly adopt formal business practices and embrace quantifiable measures of talent. In turn, the increasingly high financial stakes associated with MLB prompted the hiring of a new wave of younger, highly educated scouts with limited baseball playing experiences, sparking veteran scouts' mistrust of their commitment, visual knowledge, integrity, and frame of reference. These organizational, assessment, and personnel shifts triggered a degree of uncertainty within veteran professional baseball scouts while intensifying their information gathering expectations and decreasing their voice of influence.

Guess, Gut, and Instinct

The final element of "player selection decisions" is represented by "guess, gut, and instinct." When scout participants described how they determine which prospects to assign to their draft list, rather than share formulaic systems participants leaned on the ownership of their individual baseball experiences – in a phrase, their taste for talent.

Gary defined a "good scout" as one who takes possession of the feelings he experiences in his visual observations of prospects: "I think if a scout is gonna' be good, if he sees a player and has a good feel about him, you gotta' stick with your gut." Extending upon this "feeling,"

Gary described the physical signals he experiences when viewing what he believes to be a future Major League player:

But for me I know if I see a player it's almost like an excitement I get in my body, in my belly, and when I get that that's the guy, that's a Big Leaguer to me, and I don't care what anybody's gonna' say about that guy.

In contrast, Barry conveyed an antiseptic and pragmatic approach to instinctive prospect decision-making: "It's still irrelevant what the player is, what you think of the player. You can check a bunch of boxes but at the end of the day you kinda go on your instincts and library."

In an age when statistical metrics and quantifiable talent measurements influence final draft selections, nearly half of all scout participants emphasized the efficacy of their decision making instincts. For Joe, projecting first year success for a new signee is an opinion one cannot fully support with evidence: "The ability to compete at the Rookie Ball level – it's, it's a guess." Said differently, Ted likened assembling a draft list to a hitter anticipating a pitcher's next pitch based on previous patterns: "I would say that part of the time that you're doing this, part of it is guessing. You're guessing, you're guessing." However, Ted also emphasized that guesses are not made in the absence of observation and research, but experiential preferences – or tastes – frequently prevail:

You're putting the other stuff together with the tools, but you're really on a hunch a lot of the time. Sometimes we'll sit there at night, and I'll sit there and look at this report, and I'm going 'I just got a feeling, just a feeling, that this guy is gonna' be a player.' So I'll write that guy up to where I think he's gonna' be a player, and it's really – that's guessing, but it's a hunch. With everything I've seen from him, and like I said I'm only getting to see a few games from the guy. I'm not there seeing hundreds of games. We can't just sit on a player.

For Barry, draft list decisions are simple and unemotional: "You meet with 'em in the winter, and after 12 months you make your best guess." Jermaine emphasized the individual nature of personal taste and described prospect selection as something that is in "the eyes of the beholder"

and in large measure a matter of "gut feel." For Gary, individual taste is influenced by when and where you see the prospect perform, as well as accepting the notion that "not everybody's gonna' see the guy good." More specifically, Gary stated: "Around our business there's a lot of sometimes negativity because one scout maybe didn't see him the way you did."

Explaining what appears to be unexplainable is often described with the words guess, gut, or instinct. To this end, Bart emphasized the prevalence and importance of "gut feel" and "instinct" when making late round draft list selections, and he portrayed how the integration of a scout's full menu of experiences influence his ability to project performance expertise in the midst of average tool grades:

He may be a 40 runner with a 40 arm – everything's a 40 – but he played in the Big Leagues, why? It's your gut feel, it's your instincts, it's your frame of reference, what you don't see physically but you say 'you know what though, he knows how to play the game.' He understands situations, where to position himself, he knows everything that's going on – his baseball IQ is good, and you say 'how's he do it?'

For Gary, instincts, in the absence of negative concerns or below average grades, tip the scales and reinforce final decisions:

I pride myself in having pretty good instincts for the game, and I go – If there aren't red flags that I haven't seen and I'm wavering one way or another I'm gonna go by my gut, what I feel about that player. I don't know if that's right or not. I never have a problem with it, but I feel that my instincts are good enough to know that.

In the absence of an affirmed theoretical framework for baseball talent identification, scout participants described their decisions to identify or eliminate Major League prospects as a function of taste. Gary described his first impression reactions when he observes a potential Major League prospect: "we've all seen a guy, 'man that's the guy' – if that happens, stick with it. Go with your first gut instinct. Are ya' gonna' be right all the time? No, but you're gonna' feel good about it."

CHAPTER FIVE: TASTES FOR TALENT ANALYSIS

Veteran professional scouts in my study candidly described how they define talent, psychological makeup, and make decisions to identify or eliminate baseball prospects.

Consistent with phenomenological methodology, themes emerged from my participant interviews and resulted in a three-stage talent identification model for baseball prospects.

Within this talent identification model, the process for determining prospect attributes is influenced by scout dispositions and begins with field observation through a sequence of three actions: (1) grading *tools* and experiencing *physicality*; (2) recognizing *confident movements*; and, (3) employing *comparative recall*.

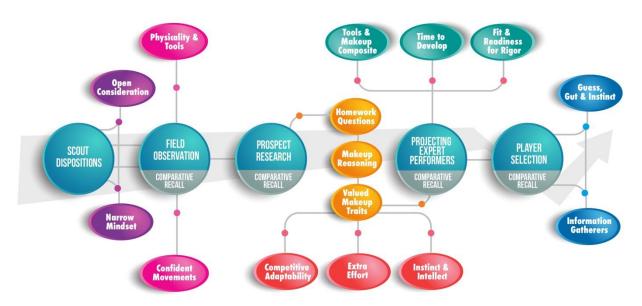
If visual talent recognition results in the identification of average Major League tools (or better), the second stage – prospect research – commences. The three-part methodology of this stage includes homework questions, make-up reasoning, and the evaluation of three valued makeup traits: (1) *competitive adaptability*; (2) *extra effort*; and, (3) *instinct and intellect*.

Preceding player selection decisions, the final stage of baseball talent identification aims to project prospects' probability for achieving performance expertise in the context of a three-part decision matrix that evaluates: (1) fit and readiness for rigor; (2) time to develop; and, (3) tools and makeup composite.

Through their reflexive narratives, my participants described how they uncover clues with their eyes and reflectively interpret what others may not see for the purpose of defining baseball talent and making decisions. As I analyzed these narratives through the theoretical lens of reflective knowledge (Schon, 1983), talent development (Bloom, 1985; Csikszentmihalyi et al., 1993), and performance expertise (Ericsson, 1993; 1996; 1998; 2007, June; 2009), I discovered three components that form the framework of scouts' tastes for true talent: (1)

scouts' dispositional mindset and *comparative recall* influences their visual knowledge; (2) scouts value the makeup traits of *competitive adaptability*, *extra effort*, *instinct and intellect*; and, (3) scouts' player selection decisions incorporate visual knowledge, valued makeup traits, and the influence of guess, gut, and instinct.

In my analysis, I theoretically interpret the three findings that form the organizational structure of scouts' tastes for true talent. As I outline these three elements, I illustrate how the theory of reflective knowledge (Schon, 1983) explains scouts' *comparative recall*, their "instinct" for making player selection decisions, and prospects' "feel" for playing baseball. I also clarify how talent development (Bloom, 1985; Csikszentmihalyi et al., 1993) and performance expertise (Ericsson, 1993; 1996; 1998; 2007, June; 2009) theories help interpret scouts' dispositional mindsets and the three psychological makeup traits scouts most value in prospects.



TASTE FOR TALENT: How Professional Baseball Scouts Define Talent and Decide Who Gets to Play

Visual Knowledge

Veteran scout participants in this study revealed two dispositional classifications that affect the process of visible talent identification. I labeled these mental inclinations *open consideration* and *narrow mindset*, and the nature of these outlooks direct the vision, the interpretations, and the performance forecasts scouts incorporate into their comprehensive process of talent identification and player selection.

In Bloom's (1985) *Developing Talented Young People*, Csikszentmihalyi et al. (1993) *Talented Teenagers*, and J. Anders Ericsson's (1993; 1996; 1998; 2007, June; 2009) research detailing the pre-determinates of performance expertise, each body of work accentuated the potential for perpetual talent development within healthy individuals in the presence of supportive networks and challenging developmental opportunities. In addition, Bloom (1985) and Ericsson (2007, June) comparably mapped the longitudinal stages of talent development, and Schon (1983) explained how reflective questions broaden the scope of practitioner's visual knowledge.

In the section labeled "dispositional mindsets" I compare and contrast the tendencies scout participants disclosed through their open and narrow interpretations of visible talent identification in baseball prospects. Scout participants also disclosed that their historical recall of memorable prospects operates as a comparative reference for grading baseball tools and identifying *confident movements*. Scouts correlate prospects' attributes with reference points found in their personal, experiential catalogue of visual knowledge. In the segment identified "*comparative recall*," I applied Schon's (1983) concepts of repertoire, expert "know-how," and interpretive inquiry to outline the role scout participants' personal prospect catalogue plays in the process of visibly identifying baseball talent.

Dispositional Mindsets

Time honored beliefs in "natural talent" approximate scout participants' reports of narrow mindset inclinations that heavily focus on genetic height, baseball tool deficiencies, fixed performance ceilings, and measurable tools. In contrast, scouts who embraced an open consideration of a wide array of potential prospects exhibited dispositions that closely paralleled the theoretical principles and effects associated with talent development through cumulative training and deliberate practice.

Bloom's (1985) retrospective study conveyed belief in the existence of large societal talent pools – "developed or neglected" (p. 5) – and his perspective aligns with scouts' depiction of a "wide funnel" mindset (i.e. open consideration) that, applied to prospect potential and visible talent identification, enlarges the field of prospects evaluated. He (Bloom, 1985) explored how the developmental effects of "environmental conditions" (p. 5) propel and transform participants into world class performers, and he determined that "no one reached the limits of learning in a talent field on his or her own" (p. 509).

Csikszentmihalyi et al. (1993) questioned whether talented teenagers escape our detection, and they determined that inadequate support networks and the lack of challenging developmental opportunities represent the chief external obstructions to talent discovery. For Ericsson (1993), environmental determinism prevails, and the three factors that derail the optimization of deliberate practice are training resources, individual motivation, and imbalanced effort.

For scouts, an *open consideration* disposition breaks away from the exclusive search for polished physical tools and instead embraces a mindset focused on identifying positive baseball abilities capable of development. Comparatively, Csikszentmihalyi and colleagues' (1993)

three-part definition of talent began with the determination that talent is a combination of both heritable abilities and performance development. Csikszentmihalyi et al. (1993) also refuted the popular belief that natural talent, when present, will always surface and never fail to escape our notice or discovery. Scout participants characterized how *narrow mindsets* demonstrate an over-reliance on visual knowledge that tends to "miss" undersized prospects or prospects still within their developmental progression. Specifically, *narrow mindset* talent identification exhibits an over-focus on tall players with above average footspeed, power, and/or throwing velocity, and this narrowly focused disposition limits the scope of scouts' evaluations to fewer prospects.

Investigated from another angle, Ericsson (1998) questioned whether the absence of natural talent in healthy humans veritably prevents the achievement of performance expertise. Ericsson (2007, June) refuted the anecdotal and intuitive explanations that point to natural talent as the primary explanation for expert performance, and instead he empirically determined that healthy individuals can effectively become performance experts through a longitudinal process of deliberate practice.

Similar to Ericsson's inquiry, scouts' *open consideration* of visual evaluations is also influenced by self-reflective questions that ponder the source and environmental conditions necessary for talent to surface. Some scouts reported that asking the questions "why?" and "how?" increase their visual clarity when a prospect's baseball tools are not quantifiably consonant with the talents of current Major League players. Scouts who adopt *open consideration* mindsets identify prospect strengths and then employ adaptive and projective thinking across multiple prospect evaluations.

Schon (1983) submitted that when knowing-in-practice becomes overly routine and repetitive practitioners are prone to stop posing the question, "what if?" (p. 145). However, the

stimulus for initiating "reflection-in-action hinges on the experience of surprise" (Schon, 1983, p. 56), and a majority of participants revealed that previous evaluation failures triggered a sense of humility, reflective analysis, and interpretative research of prospects' psychological makeup. Nearly all scout participants disclosed how embracing the imminent reality of talent identification failure reinforces the importance of perpetually asking questions.

Bloom's (1985) retrospective investigation of expert practitioners uncovered dynamic, stepwise stages of talent development devoid of hereditary direction. These patterns portrayed the developmental stages of initiation (early years), development (middle years), and perfection (later years) over a 10-15 year period and established credence for "potential" talent as a function of continuous learning and training opportunities. Analogously, Ericsson's (2007) empirical premise embraced the positive effects of cumulative training and demonstrated that, "experts continually engage in deliberate practice" (p. 12) over a period of 10 years and 10,000 hours.

Closely paralleling Bloom (1985), Ericsson (2009) framed the development of deliberate practice as a continuum of three stages: (1) fundamental skill and feedback cue introduction; (2) skill acquisition, automation, and continued practice; and, (3) constructive training challenges designed to elevate performances to new heights. *Open consideration* scouts emphasized the importance of projecting prospects' "time to develop" (i.e. into an MLB player) and the patient awareness that, much like Bloom's and Ericsson's stages of development, each player has "his own growing path."

Bloom's (1985) investigation not only provided insights into how performance experts learn and spend their time, but his summary analysis provided a foundational finding underscoring the efficacy of cumulative training and *open consideration*: "what any person in the world can learn, *almost* all persons can learn *if* provided with appropriate prior and current

conditions of learning" (p. 4). However, scouts with *narrow mindsets* exhibit an inattentiveness to Bloom's (1985) conclusion and routinely eliminate – or say "no" to - prospects when average Major League talent is not immediately and visually confirmed.

Open mindset scouts seek to identify player strengths in their search to discover "who's special?" Special in this context refers to prospects whose baseball performances surpass their tool grades and position them to become Major League players. In addition, "special" closely aligns with the psychological effects that elevate performance as a result of deliberate practice (Ericsson et al., 2009), specifically: (a) refined mental comprehension of the game; (b) heightened anticipation of key stimuli; and, (c) advanced cognitive clarity leading to exceptional response speed.

For Csikszentmihalyi et al. (1993) talent represents a social label of approval. That is, talent exists when an identified attribute has value to (i.e. cultural domain) and achieves a meaningful performance benchmark for the evaluator (i.e. social field). Scouts acknowledged that prospect height, running speed, and pitching velocity represent preferential, socially approved focal points for visible talent identification. However, scouts portrayed *narrow mindsets* as vulnerable to costly mistakes due to an over-reliance on static measurements.

Conversely, *open consideration* scouts voiced constructive criticism regarding this tendency and differentiated themselves via their commitment to an "open mind." That is, *open consideration* scouts forecast the potential effects of cumulative training over time, while static assessments of socially accepted physical abilities (e.g. size, speed, velocity) tend to overly influence *narrow mindset* scouts' talent identification decisions.

Comparative Recall

Within the process of visible talent identification, tool grades capture both subjective and quantifiable ability measurements while *confident movements* signal the presence of psychological attributes. All scout participants, however, described their use of *comparative* recall as a means to correlate, communicate, and conceptualize these elements of visible talent identification through their experiential memories.

Participants unanimously indicated a reciprocal link between their sight and their experiential instincts and at the center of this connection resides what scouts refer to as a "catalogue" of baseball experiences. A scout's mental catalogue acts as his visual library of meaningful baseball prospect evaluation, player development, and performance experiences.

In effect, scouts' individual tastes for talent are a distinctive reflection of their personal baseball histories. This catalogue – or, *comparative recall* – functions as an ever-present prospect comparison tool as well as an ever-expanding experiential data base. In addition, the depth of a scout's long-term memory also serves as a criterion for confidence when scouts make player projections and judgments.

Comparative recall – or employing comparison players from history – also operates as a communication devise when scouts compose scouting reports and/or discuss a prospect's tools and makeup with their peers or direct reports. Scouts revere the efficacy of vivid long-term baseball memories, and employing the use of stories and comparison players is a common form of opinion and information interchange among scouts.

A function of experience, the depth and the quality of scouts' *comparative recall* influences the range, flexibility, and adaptability of their talent identification lens. All scout participants ascribed some percentage of their prospect judgment decisions to comparison, and,

for most, *comparative recall* behaves as a questioning prompt that results in deeper reflection and analysis.

Open consideration scouts freely disclosed their memorable prospect "misses" and how those experiences enlarged their evaluative perspectives and generated new reflective habits and scouting instincts. In effect, their observational funnels widened as a result of talent identification mistakes and thereby expanded the odds and effectiveness of their prospect discovery.

Schon (1983) analyzed the systemic complexity of "knowing-in-action" manifested by experienced practitioners whom he defined as "specialist[s] who encounter certain types of situations again and again" (p. 60). Area scouts clearly fit within Schon's (1983) definition of expert practitioners, and he defined knowing-in-action as a tacit, often unexplainable, form of situational knowledge born of reflection-in-action (i.e. reflection in the flow of practice) and reflection-on-action (i.e. after action reflection). This knowledge emanates from and is found "in our action" (Schon, 1983, p. 49), and this form of expertise characterizes the "art" practitioners exhibit in situations that require adaptation. These situations transform the perspective of the practitioner into the mind of a researcher, not in the traditional sense "of established theory and technique" (Schon, 1983, p. 68), but rather from the vantage of interpreting the action and developing a new conceptual explanation of that specific situation.

Schon (1983) explained practitioners personally engage with and across all three levels of action: (1) the results of action; (2) the specific action; and, (3) the intuition inherent within the action. Within this process, practitioner's reflective self-talk engages their memorable recall "of examples, images, understandings, actions" (Schon, 1983, p. 138). That is, what scouts label

their "catalogue" Schon terms "repertoire," and this repertoire serves as a guide or case "precedent" for discerning meaning from uncommon and/or unique situations.

Although uncommon or unique, Schon (1983) theorized that expert practitioners are not helplessly acting with a blank slate. Rather, the experienced practitioner, comparable to veteran professional baseball scouts, is able to "see unfamiliar situations as familiar ones" and "to have a feel for problems that do not fit existing ones" (p. 140) by engaging their *comparative recall* or "repertoire." In effect, veteran scouts, performing as thinking-in-action practitioners, demonstrate an interdependent connection between their sight and their experiential instinct through *comparative recall*.

In the subsequent section, I analyze the psychological attributes, or what scouts term "makeup," that are most valued by those who evaluate prospective professional baseball players. Employing Csikszentmihalyi et al. (1993) "complex systems" of two-dimensional thinking, Ericsson's (1993; 1996; 1998; 2007, June; 2009) theory of deliberate practice, and Schon's (1983) conceptual interpretation of "spontaneous, intuitive performance," I theoretically frame the valued makeup traits reported within my participant narratives.

Valued Makeup Traits

Scout participants depicted field observation and prospect research as the first two stages of the baseball talent identification process. Veteran scouts also stressed both the importance and the interdependency of physical tools and psychological makeup, and in the final step of prospect research participants identified the components of their three most valued makeup traits. I classified these traits *competitive adaptability*, *extra effort*, *instinct and intellect*, and in this section I analyze how scouts discover and define these makeup attributes by applying the

theories of Csikszentmihalyi et al. (1993), Ericsson (1993; 1996; 1998; 2007, June; 2009), and Schon (1983).

Competitive Adaptability

Scouts accentuated the merits of and their preferences for evaluating baseball talent when prospects experience failure or adversity. In moments of challenge, scouts' opportunities to observe prospects' psychological makeup are intensified and made increasingly clear. These critical moments allow scouts to observe and to reflect upon what comes next, and they serve as tests to witness the presence and maturation of prospects' *competitive adaptability*.

Competitive failure or adversity in baseball calls for players' adaptive responses, advancing their opportunities for improvisation, adjustment, and strategic creativity in the moment. All participants disclosed case episodes of prospects' responses to competitive failure and how they reflectively envisioned prospects' self-talk when interpreting their adaptive action(s) in game situations.

All scouts underscored the frequent failure inherent to the game of baseball. This reality, scouts disclosed, emphasizes the perpetual necessity for effective coping as well as personal acceptance of the statistical frequencies of baseball failure and success. In effect, scouts painted word pictures and replayed experiential stories of what adaptation to the competitive ebb and flow of baseball should and should not look like in prospects' actions. Participants reported that effective adaptive responses by prospects in competitive settings signal their understanding of the essence of the game and its inherent rigors.

Competitive rigor challenges the presence and persistence of prospects' passion for the game. Participants underscored the indispensability of prospects' "love of the game" when attempting to forecast their survival through the player development process. However, passion

by itself is inadequate for prospect selection and advancement, and nearly all scouts underscored the importance of forgetting as a cornerstone of coping and confidence. That is, forgetting failures and critics is requisite for the development of confidence. Adaptability is evident in prospects when they confidently find ways to competitively self-correct, to reinvent, to persevere, and to overcome.

Csikszentimihalyi et al. (1993) investigated teenagers' commitment to becoming elite in their chosen disciplines and how this is actualized through their "daily experiences and self-perceptions" (p. 48). Csikszentmihalyi and colleagues' (1993) methodology for investigating commitment emanated from the flow model of peak performance and their belief that talent development is fueled by optimal experiences.

Optimal experiences are realized when performers are completely immersed in the flow of training and performance, oblivious to all extraneous personal and environmental stimuli. Aligned with scouts' definition of *competitive adaptability*, flow correlates with a quiet mind and the ability to forget. Csikszentmihalyi et al. (1993) findings noted the reciprocal relationship between "psychological complexity" and optimal experiences. They characterized a complex mindset as two-dimensional thinking that perpetually navigates the polarities of constancy and change. This complex reality parallels the psychological challenges experienced within baseball, a game failure.

Flow involves and requires the embrace of challenge in pursuit of peak performance. Similarly, baseball is laden with both the challenges and the adaptations inherent to a game characterized by low percentages of professional advancement. Competitive failure in baseball creates opportunities for adaptive responses. Csikszentmihalyi et al. (1993) emphasized that

performance skills do not remain static among talented performers. Rather, complex mindsets, "while cohesive and stable" (p. 13), remain agile "to adapt and change when necessary" (p. 13).

For Csikszentmihalyi et al. (1993) talent development is directly proportional to psychological complexity, and this attribute represents their primary lens for assessing talent potential in exceptional teenage performers. Akin to scouts' definition of *competitive* adaptability, psychological complexity correlates with a baseball prospect's constancy in pursuit of peak performance while simultaneously embracing challenge and change.

Extra Effort

I applied the term *extra effort* to describe the uncommon drive and sense of purpose scouts reported searching for in prospects. Scouts depicted *extra effort* being clearly visible in prospects' style of play and their commitment to focused training and preparation. Specifically, scouts identified *extra effort* through prospects' concentrated, purposeful exertion to improve performance - to learn, to work, and to understand the game. Some scouts underscored how the presence of this prospect attribute positively infects the work habits and performance development of other team members.

For all scouts, *extra effort* represents a key impetus for ascribing confidence in prospects' future realization of physical potential. Its antithesis – laziness, lack of purpose, indifference – serves as a cautionary sign for scouts to consider the elimination of prospects from selection.

However, the presence of prospects' exceptional physical tools periodically engenders two talent identification dilemmas for some scouts: (1) above average tools can subordinate the consideration of *extra effort* when making prospect selections; and, (2) as a learned behavior, *extra effort* is oftentimes underdeveloped and lacking in reinforcement among prospects with precocious physical abilities.

Some scouts ascribed unfulfilled potential to prospects' deficient comprehension of professional baseball's performance development expectations. Participants did not unanimously view physical talent as the primary impediment to Major League advancement. Rather, most participants described prospects' ineffective learning, incomplete understanding, and insufficient passion of and for baseball as critical roadblocks to talent development and performance expertise.

Espousing the interdependence of effort and ability, all participants described and acknowledged the importance of motivation and learning in the development of performance expertise. These attributes visibly reflect prospects' "pride" in the game and are clearly demonstrated to scouts through prospects' consistent pre-game preparations, training habits, and competitive behaviors.

Ericsson described what it takes to become an expert performer through his discoveries of deliberate practice. He (Ericsson et al., 2007, June) defined performance expertise as "reproducibly superior performance" (p. 9), and his (Ericsson, 2007) findings revealed that "experts continually engage in deliberate practice" (p. 12). Ericsson (1998) differentiated skill development and routine skill repetition (1993; 2007, June) from deliberate practice. He (Ericsson, 1993; 2007, June) defined deliberate practice as pre-meditated, structured training that includes constructive criticism, detailed feedback, and adaptive performance challenges conducted on the perimeter of a performer's current level of skill capabilities. Scouts' leading goal is predicting performance expertise, and all participants detailed their preference for prospects who exhibit the traits of deliberate practice.

In the absence of resource and effort restraints, performance improvement motivates performers to sustain deliberate practice (Ericsson et al., 1993). The desire for performance

improvement fuels a performer's will to *exert extra* effort through the rigors associated with deliberate practice. As a result, deliberate practice and its "challenges that demand concentration and effort" (Ericsson et al., 2009, p. 213) neutralize the "arrested development" (Ericsson, 2007) associated with the "automaticity" endemic to the routine practice of pre-existing skills. Applied to baseball, all scouts reported the desire to identify prospects' consistent tool and makeup improvements across multiple observations over a longitudinal period of time.

Instinct and Intellect

Scout participants spoke to baseball *instinct and intellect* using words and phrases such as "internalizing the game," "feel," "baseball player," "getting it," and "baseball rat." Their references pointed to how baseball players intuitively understand their movements, decisions, and actions within the situational contexts of the game. In this regard, a prospect's baseball intuition – his identification of perceptual signals, his anticipation of movements and patterns, and his reactionary speed to game action – theoretically aligns with the byproducts of deliberate practice and represents the inverse of automaticity (Ericsson, 1993; 1996; 1998; 2007, June; 2009).

Prospects demonstrate an absence of baseball *instinct and intellect* for scouts when they fail to know how to "read" baseball cues, tendencies, movements, and patterns in ways that fully utilize their physical tools. All scouts reported an affinity for prospects that adapt and elevate their performance in response to the competition and the game situation. Participants described episodes of prospects that showcased *instinct and intellect* by inventing ways to succeed at baseball in the moment, and the most memorable illustrations of this attribute occurred when the result of the game hung in the balance.

Scouts described how the development of baseball *instinct and intellect* in a prospect is not guaranteed. They explained how the speed and the breadth of this attribute's maturation – if it unfolds – positively influences the path of a prospect's upward advancement within the minor league system. Participants also accounted how baseball *instinct and intellect* do not inherently develop in parallel timing with prospects' physical baseball tools. Prospects with baseball *instinct and intellect* know how to read perceptual cues, play by feel, and "think" with their muscles, and prospects' deficiencies in this attribute impede their full development of baseball potential.

Schon (1983) described "intuitive performance" as practitioner "know-how" intelligently revealed in action. This situational intellect is developed through experience and reflection, and it is exhibited within practitioners' spontaneous, tacit perception of and response to phenomena. Schon's (1983) framework for "intuitive performance" parallels scouts' descriptions of prospects that have spontaneous, intuitive "feel" for their competitive baseball movements, timing, decisions, and situational adjustments.

Nearly all participants described the importance of prospects' ability to "synthesize" the game, to turn fundamental into feeling and effectively "read" baseball's stimuli in action.

Similarly, Ericsson's (1998) performance expertise research detected the development of "predictive perceptual cues" (p. 414) in subjects who practice deliberately. As a result of performance experts' deliberate practice, Ericsson (1998) also identified the maturation of "physiological adaptations" (p. 413) that advance performers' cue recognition, anticipation, and response speed (Ericsson et al., 2009). These results reflect the key player development goals of minor league baseball and Major League scouting departments.

For Schon (1983), spontaneous movement, signal recognition, and decision-making are distinctive characteristics of knowing-in-action. A practitioner's repertoire serves as a lens for detecting variances in action. In pursuit of desirable results, reflective practitioners respond to phenomena and adapt their action(s). Situations that require rapid responses bring together "feel" (for phenomena) and skill (in action) to produce artistic, adaptive responses. Scout participants described prospects with *instinct and intellect* as those who monitor their performances, make technical adjustments, and "show ya' a little bit more."

All scout participants highlighted the value of prospects' ability to play intelligent baseball and indicated this is a requirement for Major League players. This baseball intelligence for scouts is exhibited by "guys that really, really know what they're doing on the field."

One of the developmental effects of deliberate practice is the enhanced mental acuity performers embody in their ability to "monitor their performances through continued improvements" (Ericsson, 1998, p. 414). Ericsson et al. (2009) stated explanations of performance expertise will remain unclear to the extent uncertainty persists with regard to "how elite performers develop the complex cognitive mechanisms" (p. 204) that accelerate performance expertise. For Schon (1983) and scout participants, this complexity is both answered and described as tacit intuition personified by adaptive performances. In the final section, I analyze how participants process their scouting observations and engagements and discern their decisions to identify and eliminate Major League prospects.

Player Selection

Professional baseball organizations are increasingly pressed to clarify, defend, and quantify their prospect identification and selection methods in today's high compensation climate. While incapable of clearly perceiving from prospects' pre-draft performances,

organizations and scouts perpetually work to discover and differentiate prospects who will become future expert performers. Franchises that incrementally increase their draft yield of Major League players will more effectively utilize their talent identification and development resources and position their franchise for competitive greatness.

Player selection represents the final stage of area scouts' systems for appraising their tastes for true talent - or, more directly, for answering the two-part question of how scouts define talent and make prospect decisions. Participants identified the distinctive effects of "guess, gut, and instinct" in their decision making cognitions and I analyzed this application through the lens of Schon's (1983) theory of reflective knowledge.

The work life of an area scout is characterized by perpetual prospect assessments. This occupational role historically embodied lifelong commitment across a high percentage of scouts. Yet participants portrayed today's organizational climate as encumbered with a proliferation of quantifiable talent measures compiled and analyzed by a cadre of youthful, educated scouting personnel devoid of personal competitive baseball experiences. These experiential deficiencies triggered sentiments of mistrust within participant narratives. Scouts detailed the intensification of organizations' information gathering expectations and subordinated regard for their interpretative voice.

Despite organizations' sharpened reliance on statistically-based prospect decisions, scouts fully owned the efficacy of their personal instincts and *comparative recall*. While requisite tools are primary and makeup traits highly valued, forecasting performance development two to five years in the future is incapable of complete empirical support. Some scouts described future performance projections as a "guess," or, more clearly, an informed

guess based on a prospect's performance patterns aligned with and compared to scouts' comparative recall.

For all scouts, taste is personal and represents a form of visual knowledge that often ignites emotional convictions. Some participants described this knowledge and emotion as "gut feel." Scouts reported gut feel also necessitates the cognitive understanding peers and supervisors will not glean the same knowledge from the same prospect through their visual evaluations.

Scouts utilized the term "instinct," in part, to explain what is often unexplainable. All participants referred to the importance of employing their resources to select and project prospects – their frame of reference, visual tool grades and impressions, makeup assessment, and reflective thoughts. Several scouts bestowed high praise on their peers who understand the essence of each prospect's personal situation and identify the "little things" that fuel performance development. In sum, participants defined instinct as a one's taste for true talent emanating from *comparative recall* and resulting in a decision to identify or eliminate a prospect.

For Schon (1983), expert practitioner's knowing-in-action unfolds without intimate awareness or pre-planning. In most instances, uncertainty or surprise prompts practitioner experimentation, manifested as exploration, move-, or hypothesis-testing (Schon, 1983). Practitioners replay and/or "feel" the action as a movie in their mind to search for new understandings and/or adaptations that yield better results (Schon, 1983). This reflective experimentation creates "a new theory of the unique case" (Schon, 1983, p. 68), and this new theory expands both a practitioner's repertoire and instinct. Across nearly all narratives, scout participants shared stories of "missed" evaluations that triggered surprise, their reflection-inaction, the creation of new understanding, and an expanded repertoire.

Participants described *narrow mindset* scouts' tendencies to "miss" prospects. *Narrow mindsets* ignore the reflective prompts of uncertainty and surprise, embrace the thoughtlessness of routine, and hold firmly to the standards of baseball's technical rationality. Technical rationality supplants reflection in practice and stymies instinct (Schon, 1983). Comparatively, *open consideration* scouts "frame the experiment" (Schon, p. 1983, p. 63) and employ the "Method of Difference" (p. 142). For Schon (1983), some version of the Method of Difference is indispensable to reflection-in-action in order for experimental reasoning to occur. Experimental inferences tap practitioners' repertoires and further expand the acuity of their intuition (Schon, 1983).

Schon (1983) highlighted the efficacy of "virtual worlds," and he defined these as a choreographed mental model "of the real world of practice" (p. 157). Virtual worlds determine the rigors of practitioners' reflective experimentation and influence their ability to artistically, intuitively perform (Schon, 1983). Experienced practitioners employ virtual worlds to slow the pace of action and employ "accurate rehearsals" (Schon, 1983, p. 159) to make adjustments and/or solve problems.

Scouts reported facing decision-making dilemmas when prospects' tools significantly exceed the maturity of their makeup and vice versa. In assessing tools and makeup, some scouts identified two principles: (1) situational evaluation; and, (2) visualization of prospect development through the lens of makeup. Similar to Schon's (1983) employment of virtual worlds, participants underscored the value of stepping back and reflectively slowing the action to intuitively evaluate each prospect.

Schon (1983) analyzed the management of organizational life, pointing to the reflectionin-action similarities of practitioners while also identifying the "special features of its own" (p. 242). Management done well reflects upon the "phenomenon of organizational life" (Schon, 1983, p. 242) as both the setting and the substance of knowing-in-action. Managers' repertoires are influenced by their organizational histories, and organizational structure and culture (i.e. "learning system") affect adaptability and the reinforcement or constraint of reflection-in-action (Schon, 1983). Arrested reflection-in-action impedes the development and employment of instinct (Schon, 1983). In near unanimity, scout participants outlined the experiential divide that prompts doubt and loss of empowerment in today's scouting departments. In lieu of decision-making instinct, today's scouting departments more heavily rely upon quantifiable measures and technical demonstrations of baseball talent to identify and eliminate prospects.

Only a small fraction of athletic talent research investigates talent identification judgment through the lens of scouts and coaches. This study explored and analyzed how veteran professional baseball scouts make meaning of what they see, how they interpret prospects' mindsets, and how they make player selection decisions. My analysis of veteran professional scouts' reflexive interviews revealed that tastes for baseball talent is explained in three ways.

One, scouts' dispositional mindset and *comparative recall* influence their visual knowledge when defining physical talent. Two, baseball scouts value the psychological makeup traits of *competitive adaptability, extra effort, instinct and intellect*. Three, while scouts' player selection decisions incorporate visual knowledge and valued makeup traits, their final judgments are influenced by guess, gut, and instinct.

Concluding Analysis

Expert performers think and train differently than non-experts, and baseball scouts play an influential role in defining talent and deciding who gets to play professional baseball.

According to my study, scouts' mindset influences *comparative recall* and visual knowledge.

Open consideration scouts paralleled talent development theorists' (Bloom, 1985; Csikszentmihalyi et al., 1993; Ericsson, 1993; 1996; 1998; 2007, June; 2009) belief in large societal talent pools, the importance of support networks, the developmental stages of talent development, and the positive transformational effects of challenging opportunities. Scouts with this mindset identify the performance strengths displayed by prospects, employ adaptive thinking (Csikszentmihalyi et al., 1993; Schon, 1993), and their previous evaluation failures trigger reflective analyses. Veteran scouts, performing as thinking-in-action practitioners, demonstrated an interdependent link between their sight and their experiential instinct through their comparative recall (repertoire).

Second, veteran scouts stressed the positive interdependency of physical tools and psychological makeup, and they disclosed their three most valued makeup traits – *competitive* adaptability, extra effort, instinct and intellect. Prospects demonstrate competitive adaptability when they confidently find ways to self-correct, and psychological complexity (Csikszentmihayli et al., 1993) correlates with prospects' constancy in pursuit of peak performance while navigating challenge and change. Scouts' descriptions of extra effort approximated Ericsson's (1993; 2007, June) definition of deliberate practice represented as structured, pre-meditated training with constructive feedback and adaptive performance challenges. Prospects with baseball instinct and intellect exhibit an intuitive "feel" for their competitive movements, timing, and situational decisions (Schon, 1983), augmented by the anticipatory, cue recognition, and reactionary speed byproducts of deliberate practice (Ericsson, 1993; 1996; 1998; 2007, June).

Third, scouts' prospect judgments employ visual knowledge and valued makeup traits channeled by guess, gut, and instinct. Today's MLB scouting departments increasingly rely upon statistical and technical demonstrations of tools and makeup in lieu of scouting intuition,

and these forms of technical rationality hinder reflection and confound instinct (Schon, 1983). Evaluation "misses" trigger surprise for *open consideration* scouts, mobilizing reflection-in-action, new understanding and expanded repertoires (Schon, 1983). Scouts' taste for talent is a personal, often emotional, form of visual knowledge that reflectively considers prospects' talent and makeup when making intuitive player selection decisions (Schon, 1983).

This study explored talent identification knowledge and interpretative decision-making through the reflections and mindsets of veteran professional baseball scouts. Talent identification for these scouts is a matter of taste, advised by mindset and *comparative recall*, influenced by prospects' makeup, and guided by guess, gut, and instinct.

CHAPTER SIX: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

In this qualitative inquiry, veteran professional scouts reflexively and transparently disclosed how they define baseball talent, value psychological makeup, and make player selections. The analysis of my participants' views of their scouting experiences, insights, and methods yielded three findings that frame the components of scouts' tastes for talent: (1) one's dispositional mindset influences *comparative recall* and visual knowledge; (2) the makeup traits of *competitive adaptability, extra effort, instinct and intellect* are highly valued; and, (3) guess, gut, and instinct integrated with visual knowledge and valued makeup traits direct scouts' player selections.

The discovery of baseball talent is often more implicit than clearly defined, and my participants' narratives exemplified how professional baseball scouts interpret the logic of their perceptual knowledge to identify talent and make prospect judgments. My inductive reasoning and interpretative analysis of veteran scouts' experiential memories and talent identification methods position me to propose a "checklist" of recommendations for effective professional baseball scouting. In this chapter, I examine the pivotal findings in my analysis to recommend talent identification benchmarks for those who assess baseball talent and decide who gets to play. I also evaluate the limitations of my study while suggesting targets and topics for future research.

Recommendations for Effective Professional Baseball Scouting

The search for professional baseball talent includes high player development costs and low odds for Major League advancement. The purpose of this study is to understand how scouts identify the player talents and attributes fundamental to the development of baseball performance expertise and make selections.

In describing the processes of scouting, participants frequently made the statement, "you just check the boxes." Scouts' meaning behind this expression implied a systemic and evaluative question: Does the prospect display average Major League tools and impressions of makeup that forecast future performance expertise? The "boxes" in this case are: (1) quantitative grades and measurements for all five tools; and, (2) qualitative makeup assessments from on-field actions and off-field research.

In response to my data identification and analysis, I present six "check the box" recommendations that identify the necessities of effective professional baseball scouting in an effort to increase organizations' yield of Major League players: (1) "Like players, because somebody has to play." (2) Distress illuminates – does what comes next adaptively flow? (3) Own your vision, recall, and instinct. (4) Perpetually ask two questions: why and what if? (5) "You can't work with laziness." (6) Meaning of Baseball Talent Identification = the sum of measurements, movements, makeup, myths, and misses.

"Like Players, Because Somebody has to Play"

From January to June, area scouts' time is in scant supply, and their accuracy identifying prospects that develop and advance to the Major Leagues is influenced by the quantity and quality of evaluation time they invest in individual prospects. Not every prospect receives the same amount of evaluation time. Participants reported that genetic height and measureable tools elevate scouts' talent identification confidence.

Although confidence is elevated, scouts' also disclosed that the tendency to over-focus on measurement occludes signs of negative makeup and this disposition is endemic to *narrow mindset* scouts. *Narrow mindsets* frequently define height and specific baseball tools (e.g.

running speed, throwing velocity) as "natural abilities" with fixed capacities for development and expertise.

While *narrow mindset* scouts economize their time by frequently saying "no" (i.e. eliminating) to short prospects (e.g. under 6'0") and/or those whose visual demonstrations of measurable tools currently falls below Major League average, they frequently miss seeing the self-sabotaging effects of inadequate makeup and the synergy of exceptional makeup in developing players who will later achieve baseball expertise. *Narrow mindsets* get stuck in static standards and deluded by preferential forms of baseball performance. When scouts "like" players they believe "everybody on the field is a prospect until they show you that they're not." A disposition that "likes players" passionately embraces a strengths-based search for talent, a pragmatic curiosity, and an understanding that the full meaning of baseball expertise is not subject to quantifiable measurements.

Scouts' dispositional mindset influences their visual knowledge. Visual knowledge is the source of *comparative recall* and both constructs influence prospect selection decisions. Whether identifying baseball talent on a tryout field with 100 prospects or screening job candidate resumes in a same size applicant pool, an *open mindset* that "likes players" is focused on identifying signs of strengths and makeup. The appearance of the performance or a static measure will not convey the full capacity for performance expertise in the moment.

Distress Illuminates – Does What Comes Next Adaptively Flow?

Baseball is a game of error and low percentages of success. Participants described distress in baseball as slumps, failures, adversities, and competitive challenges. Nearly all participants characterized these moments as an opportunity to experience "your best day of scouting for the year." When scouts witness prospects' distress they can visually identify what

comes next. Distress reveals makeup and catalyzes opportunities to evaluate prospects' adaptive responses, improvisation, confidence, and strategic creativity in the moment.

Adaptive responses represent new ways to deliver better results that differ from performers' existing "know-how" (Schon, 1983). In the absence of distress performers can rely on the automaticity of their current skills and the stability of their repertoire. However, distress challenges confidence, introduces instability to habits, and incentivizes the need for change in the moment.

High-level, competitive baseball inherently includes clear goals, perpetual feedback, ever-present challenge, and tests players' capabilities. These conditions represent the antecedents to flow experiences (Csikszentmihalyi et al., 1993). Flow encounters motivate performers to pursue performance improvement so they can more frequently repeat the success of their flow experiences, and this feedback loop fuels the development of performance expertise (Csikszentmihalyi et al, 1993). Flow is never static, and it perpetually negotiates the interdependent opposites of constancy and change – that is, flow is both stable and adaptable (Csikszenmihalyi et al., 1993).

Identifying what prospects do next in moments of baseball distress provides scouts with unparalleled opportunities to evaluate adaptability and flow. Adaptability requires reflection, promotes the expansion of instinct, and deepens a prospect's understanding of the essence of the game (Schon, 1983). Flow is present when prospects play the game instinctively well on automatic pilot with a quiet mind (Csikszentmihalyi et al., 1993). Prospects who frequently adapt and perform in the "flow" of the game predict to consistently improve and achieve performance expertise at levels that "exceed their tools."

Own Your Vision, Recall, and Instinct

Scouting is one part observational, and scouts' visual knowledge is reciprocally related to their *comparative recall* and baseball instincts. Several participants disclosed that it is the hopeful stimulation of their visual knowledge – identifying "a guy," a prospect with Major League tools – that emotionally propels them to baseball fields daily.

Scouts' *comparative recall* (repertoire) is defined as their personal, experiential library of prospect case studies. When they visually identify "a guy," they compare their visual prospect appraisal to their memorable recall of both successful and unsuccessful prospects. Participants reported this reflective comparison either identifies or eliminates the prospect for further consideration.

The depth of scouts' experiential recall influences the span of the visual talent cues they recognize. For the reflective scout, comparing visual knowledge in action with memorable recall triggers reflection-in-action and/or reflection-on-action (Schon, 1983). Scout participants reported that visual identification of Major League tools, confirmed by memorable recall comparison, ignites a sense of visual ownership. These spontaneous, cognitive processes explain why scouts see what they see and how they develop individual tastes for talent.

Taking exclusive possession of one's baseball vision, recall, and instinct lays the foundation for a diagnostic, reflective mindset. What scouts see (visual identification) triggers comparisons to what they saw in the past (repertoire), and the meaning they extract from uncertain, surprising, or unique visual cues correlates with similar cues found in their repertoire (Schon, 1983). When uncertain, surprising, or unique visual cues do not equate with a scout's repertoire, reflection-in-action leads to experimentation (Schon, 1983). Experimentation is

necessary for making inductive inferences and is exploratory, move-testing, or hypothesis-testing (Schon, 1983).

Historically, scouting knowledge is primarily transactional – passed on from one to another. However, discovering prospects requires fervor to uncover performance cues and reflectively experiment with what others may not see or consider. Taking ownership of one's vision, recall, and intuition paves the way for making experimentation that stretches one's inductive inferences beyond their current level of competence.

Perpetually Ask Two Questions: Why and What If?

As a result of my personal coaching experiences, my introduction to this study included the written statement: "Scouts do not talk about misses or why draft selections, assumedly capable of advancing to the Major Leagues, do not make it" (p. 12). My introductory statement proved incorrect. All scout participants shared insights they learned from their analysis of "missed" prospect evaluations. Participants emphasized the truth that scouts will "miss" on prospects when identifying talent and making player judgments. More importantly, my participant data underscored the utility of perpetually asking the question, "why?" as a method and remedy for clarifying scouts' observations and interpretations.

When describing player selection "misses," scouts shared their desire not to fail and how this pursuit humbly drives them to ask the question, "why?" Habitually asking this question develops a reflective mind and widens scouts' "funnel" (i.e. *open consideration*) for prospect evaluations.

Prospect judgment is influenced by *comparative recall*, and evaluation "misses" become components of scouts' recall (repertoire). This frame of reference prompts comparative questions when current prospects approximate some of the traits of previous prospect "misses."

This comparative conversation induces scouts' deeper analysis as they attempt to forecast a prospect's future performance capabilities by asking the question "why?"

All scouts also disclosed the importance of homework questions, or, more clearly, the value of engaging in conversation with prospects and their support network. This process is investigative, conversational, and relational. It requires that scouts take the time and ask tough questions. The purpose of these questions is to answer the "why?" behind the situational specific makeup of each individual prospect.

Routine blocks the need for reflection and is exhibited as automaticity (Schon, 1983). However, Schon (1983) described how uncertainty and surprise lead to self-reflection and intuitive adjustments within expert practitioners. These intuitive adjustments represent what is often referred to as an artistic response (Schon, 1983). Expert baseball performers make similar artistic adjustments when performing.

I believe scouts also periodically make artistic judgments. Specifically, participants described their affinities for an undersized player, for a player with below average tools and above average makeup, or for a player in a performance slump who continues to adaptively compete. When scouts reflect-in-action they conduct "what if?" research to reflectively explore the professional baseball possibilities of what they see (Schon, 1983). Participants referred to stepping back in these instances; pausing to self-reflect and critically evaluate the prospect. Pausing sustains reflection and helps limit scouts from getting lost in the action of group-think or "one-off" evaluations (Schon, 1983).

As scouts perpetually ask the questions "why?" and "what if?" they increasingly engage in self-reflective conversations (Schon, 1983). These conversations expand their repertoire, fine-focus their visual knowledge in new ways, and increase their baseball instincts. Elevated

instincts accelerate scouts' visual cue recognition (Ericsson et al., 2009) and the accuracy and speed of their player judgments (Schon, 1983).

"You Can't Work With Laziness"

Participants defined the valued makeup trait "extra effort" as uncommon drive and purpose. Conversely, laziness represents a diminished desire to exert extra effort and achieve. Participant narratives, when relating prospect stories, frequently reinforced the interdependency of effort and ability as a critical component of talent development. Within those narratives, some scouts described how a prospect's extra effort in the presence of average to below average Major League tools intensified his interest. On the other hand, some participants' accounts described how they walked away from above average Major League tools because laziness prevailed in the prospects' makeup. Still others replayed how they hoped that drafting a prospect would "change" the makeup of his achievement motivation and drive.

Paul Snyder, former Atlanta Braves Scouting Director, consistently queried his scouts: "Which players are going to seek their level?" (Shanks, 2005, p. 338). "Level" in this context referred to prospects' forecasted potential based primarily on measurable physical tools. Paraphrased simply, Ericsson began a stage of his work with the theoretical question: If you train hard enough, can you make yourself into a great performer? (Ericsson, 1998).

Some scout participants detailed how they identified unfulfilled potential in prospects' performances. In these case narratives scouts identified how coaches and support networks reinforced prospects' performance results instead of their training effort, work ethic, and desire to improve. In these instances, scouts correlated prospects' failure "to seek their level" as a result of ineffective learning, incomplete understanding, and insufficient passion.

Scout participants associated passion for the game as a fundamental ingredient for sustained performance improvement. Ericsson et al. (1993) found that performers are motivated to deliberately practice because they believe their efforts directly impact their performance improvements. We "can't work with laziness" because it reflects the duality of diminished passion for the game and the absence of the effort required to sustain deliberate practice, and this combination will not result in performance expertise. If the strength of a prospect's makeup predicts his retention through the minor league player system, then an absence of *extra effort* forecasts questionable persistence and risky investment.

Meaning of Baseball Talent Identification = Sum of Measurements, Movements, Makeup, Myths, and Misses

This segment represents the final talent identification benchmark for effective professional baseball scouting, and it centers on the concept of meaning. Meaning is difficult to measure. This study positioned me in the field as a data gathering agent to collect veteran scouts' viewpoints and to interpret the meaning of their talent identification and decision-making experiences.

Participants spoke to MLB organizations' intensified demand for prospect data measures. Tool grades are one part quantitative (e.g. running speed, spin rate, throwing velocity) and one part subjective (e.g. fielding, pitching delivery and mechanics) as well as the comparative product of recall. Despite individual perceptual differences, tool grades standardize physical baseball skill measures. They represent the minimum entry requirements for professional baseball consideration, and participants disclosed most prospects are quickly eliminated based upon their tool grades.

Measurement can also be performance related. Beane's (Lewis, 2004) analysis found that all heights and sizes of prospects have the capacity to exhibit high OBP. He disregarded heavy emphases on sight-based and projective scouting methods in exchange for measures of statistical validation of what a prospect "has done" (Lewis, 2004, p. 38). Beane (Lewis, 2004) employed specific statistical measures in scouting because they substantiate the simultaneous presence of skills and makeup.

The talent account does not assure the presence of psychological makeup. However, participants described how prospects' on-field movements reveal confidence, maturity, leadership, and desire. *Confident movements* also demonstrate prospects' understanding and "feel" for their performances; their recognition of the game's response cues; and the intellect to know when and how to elevate or adapt their performance based on the situational demands. In many instances, scout narratives depicted examples of prospects' *confident movements* as reflections of artistic improvisation, knowledge of self, and knowledge of baseball.

Participants affirmed the absence of a standardized definition for "makeup" within the scouting ranks while underscoring the interdependent relationship of tools and makeup in the pursuit of performance expertise. For scouts, makeup reflects a prospect's mindset and determines his readiness for talent development. Participants described makeup as both a catalyst and a determinant for performance expertise. They emphasized makeup is not quickly determined; it contains both synergistic and sabotaging properties; and, it is both individual and situational specific. Using Schon's (1983) concept of creating virtual worlds, makeup is about scouts' minds getting inside prospects' minds to identify "psychological complexity" (Csikszentmihalyi et al., 1993) and the "complex cognitive mechanisms" (Ericsson et al., 2009, p. 204) that form the foundation for achieving expertise.

My review of literature and participant narratives both pass along the perimeter of several myths. I define the term myth in the context of baseball talent identification as notions, ideas, or concepts that are empirically incomplete. That is, we are unable to clearly define and completely substantiate their cause and effect application to baseball. These concepts range from empirical debates regarding nature and nurture to determining an empirical definition of the makeup components baseball expertise requires. In near unanimity, scout participants emphasized the importance of doing your own work and perpetually asking questions. I interpret the words between scouts' lines as a charge to those who search for baseball talent to demystify, to find truth, and to make meaning from what we see in every possible way.

Most scout participants disclosed the impact prospect identification "misses" had on their reflective thoughts, visual knowledge, and instinct. Within scouts' narratives of lessons learned existed humble statements emphasizing the uncertainty of baseball talent identification. Scouts underscored the inherent failure associated with identifying baseball talent and forecasting expertise. In effect, scouts are incapable of complete knowledge in this endeavor, but when they embraced the realities of "misses" their repertoires deepened and their instincts sharpened.

Scout participants frequently made the statement "use all your resources" when describing "how" they make prospect judgments. However, scouts did not detail what a standardized list of resources looks like. Rather, participants reported that meaning is the sum measure of the components contained within measurements, movements, makeup, myths, and misses. In the end, scouts' vision of prospects' future performance is determined by their resource information, instincts, and their best estimate at that moment.

Limitations of this Study and Recommendations for Future Research

I conducted this study within a narrowly defined population of veteran professional baseball scouts. While this population displayed "well-stocked memory banks" (Kerrane, 1999, p. 324), my study did not include the potentially contrasting and performance-based perspectives of newer members of the professional scouting ranks. My population only included long-tenured baseball scouts and recruiters who navigated many years of service. Not all scouts become long tenured, and my data does not include the potentially valuable insights of those scouts who do not persist or are not retained. My interview time with each participant included only one long interview and scouts' responsive replies at that time. It is challenging to condense decades of experiential insights into one visit, and participant disclosures are potentially expanded and enriched across multiple interviews. Last, as recently as 2000 I served as a collegiate head baseball coach and recruiter. In several instances, participants represented competing colleagues from my past professional life. While my role today contains no competing elements, I enjoyed access to this population as the result of trust and credibility from a former body of work. Conducting this study with an investigator who has alternative or no prior baseball experiences will potentially yield a different mixture of narrative responses. In the subsequent paragraphs, I recommend several targets and topics for future baseball talent identification research.

This study investigated visual knowledge through the eyes of veteran professional baseball scouts. Although prior qualitative investigations of this type are rare within professional athletics, I submit the potential merits of similar explorations conducted within the scouting ranks of the NFL, NBA, and NHL. While sporting skills differ across the organizations, the value of makeup likely prevails, and the economic pressures of each professional body are of similar intensity and magnitude.

Much of what we know about professional baseball scouts' talent identification and decision-making methods and intuitions is tacit. However, I enjoyed lengthy, transparent, and candid interviews across several participants. This study is about them, and they have a story to tell. In this context, I propose a qualitative investigation that employs video to capture the insights and perspectives of veteran scouts. These individuals are qualitative researchers of long standing. Video analysis will deepen our scope and understanding of visual knowledge and intuition while also preserving the historical personas of this area of practice.

Instinct is chiefly unexpressed within expert practitioners (Schon, 1983), and the topic of this study applies to an in-depth case study design that explores the visual knowledge and intuitions of professional baseball scouts. While time-intensive, the potential merits of the results have application to better understanding the clues, as disclosed by expert practitioners, to baseball performance expertise.

Participants yearned to evaluate prospects in situations of challenge, struggle, or adversity. Prospects' responses in the moment underscored scouts' affinity for the traits of adaptability and artistic improvisation. Scouts noted these traits reflect knowledge of self and the essence of the game. I propose a qualitative investigation of "adaptability" within Major League players. A deeper understanding of this construct will help identify the traits that perhaps most powerfully predict performance excellence, and this knowledge will potentially adjust the visual cues talent scouts seek to identify.

Conclusion

My personal scouting experiences inspired this exploration into the insights of veteran professional baseball scouts to learn how their tastes for talent and attributional definitions advise and inform their player selection decisions. In general, this study contributes to the talent

identification, performance expertise, and reflective practitioner knowledge bases through the interpretative eyes and experiential narratives of veteran professional baseball scouts. More specifically, this study discloses the interdependencies associated with professional scouts' visual knowledge, comparative recall, and baseball instincts while providing explicit definitions for the psychological makeup traits they value most in prospects.

Deciding who gets to play – or determining "who to hire" – is a critical responsibility within any team, organization, business, or profession that aspires to attain success through performance and leadership. Talent identification is a determinative operation, and the composition and capability of talent and potential are considered to be either an asset or a liability. Potential is defined as something that is yet to occur or mature to its fullest capacity while simultaneously underscoring belief in the possibility of development and growth.

Whether one's focal point is the high financial stakes climates of professional baseball or business, today's competitive enterprises reflect levels of ever-increasing complexity, heightened performance expectations, and narrowing margins of accepted talent identification error. Within these complex and challenging environments, the efficacy of *competitive adaptability*, *extra effort* in the midst of challenge, and intuitive performance are intensified. This intensification sharpens our awareness and scrutiny of talent scouts' dispositions and the psychological makeup of prospective performers and leaders. The object of effective scouting and hiring is to make good decisions – to widen our visual mindset and to reflectively discover potential expert performers. This study clarifies the visual, reflective, and intuitive components of sight-based baseball scouting, and these elements, integrated with prospects' statistical and performance measurements, plausibly augment and fortify the accuracy of individuals' and organizations' tastes for talent identification.

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Appendix A: Script for Participant Recruitment E-mail

Dear [First Name],

I scouted the Mid-Atlantic region as an NCAA I baseball coach from 1983-2000. For my dissertation, I am conducting a study to explore how professional baseball scouts define talent, determine potential, and make prospect decisions.

My purpose in writing today is to invite you to participate in this study. I selected you as a potential participant because you are a veteran scout, and your experiences, instincts, and intuitions about baseball talent identification are valued.

The focus of my study is to explore how professional baseball scouts make meaning of what they see and forecast potential. My research method is both simple and flexible.

If you agree to participate, I will travel to conduct an in-person interview with you at a date, time, site, and location of your choosing and convenience. The interview will include five open-ended questions and projects to last 75-120 minutes. The in-person interview will be audio-taped, and you will have opportunity to review, modify, and/or delete any of your responses. Participation in this study is voluntary, confidential, and your name will not be used or recorded.

No payment or cost is involved with your participation in this study.

I hope you will participate in this valuable exploration, and I will reconnect with you in 5-7 days to discuss the possibility of scheduling a date/time to visit in-person, answer any questions you may have, and outline additional details.

Many Thanks, Scott D. Scott Gines University of St. Thomas (MN) doctoral student

Appendix B: Participant In-Person Interview Reminder E-mail

Dear [First Name],

This is simply a quick reminder of our upcoming meeting [date, time, location]. I look forward to connecting with you in-person.

Our in-person interview will last 75-120 minutes and consist of five open-ended questions about how you identify baseball talent and make prospect decisions. At the beginning of our time together, I will provide you with a brief consent form, answer any questions you may have, and supply you with a mutually signed copy.

Your responses to the five interview questions will be reflective, and to help you prepare in advance simply consider two themes based on your experiences: (1) how you define and value baseball talent and makeup; and, (2) your philosophy for judging potential and making prospect decisions.

I look forward to seeing you in person [date, time, location]. Should you need to contact me while traveling, my mobile number is 304-786-0216.

Many Thanks, Scott D. Scott Gines University of St. Thomas (MN) doctoral student

Appendix C: Review Typed Transcript E-mail

Dear [First Name],

Thank you again for your time and willingness to serve as a participant in my study. Attached to this email is a typed transcript of our in-person interview on [date]. Please review the transcript to verify its accuracy, confirm your acceptance of its contents, and/or to share any corrections or modifications you may desire.

Thank You in Advance,
Scott
D. Scott Gines
University of St. Thomas (MN) doctoral student

Appendix D: In-Person Interview Questions

The in-person interview will be a fluid process, and I will introduce/re-introduce myself to each participant and allow each participant to do the same. This mutual introduction/re-introduction will focus on sharing career movements and professional roles to establish a setting of ease, common ground, and trust.

General Background Questions

- A. Professional Baseball
 - 1. Did you have the opportunity to play professional baseball? If yes, how many years did you play?
 - 2. How many years have you/did you worked/work in professional baseball scouting and in what roles?
- B. College Baseball
 - 1. Did you have the opportunity to play college baseball?
 - Did/do you coach college baseball?If yes, how many years and at what level(s)?

Open-Ended Interview Questions

- A. The First Year Player Draft is a decision-making process, and the ultimate goal is accurate performance prediction.
 - (1) From your experiences, when you see a prospect how do you visually recognize physical talent?
 - Probes:
 - ^ I'm curious, how do you compare "seeing" talent to "describing" talent?
- B. Scouts search for prospects with great physical talent *and* psychological makeup, but this complete package doesn't always develop simultaneously in prospects.

Said another way, all prospects with draft-able physical talent don't always demonstrate exceptional makeup, and some prospects with exceptional baseball makeup aren't great athletes physically.

- (2) From your experiences, how do you use your baseball mindset your intuitions, instincts, and experiences to interpret prospects' psychological makeup?
- Probes:
 - ^ I'm curious, how do you weigh the value of a prospect's makeup compared to his physical tools?
 - ^ Comparing players who make it to the Major Leagues and those who don't, do you find any differences between how these two groups think and train?
 - ^ Have you determined any psychological attributes you believe are critical to expert baseball performance?
- C. As a scout, you spend extensive time in the field making observations and notes and identifying talent and predicting potential are both difficult and critical in professional sport.

- (3) How do you make meaning of everything you see and hear in the field and forecast a prospect's future performance?
- <u>Probes</u>:
 - ^ From your experiences, when you compare a prospect's present talent to future potential what key things do you look for or what questions do you ask yourself?
- D. How do you decide to identify or eliminate a prospect?

Appendix E: Consent Form

Tastes for True Talent: How Professional Baseball Scouts Define Talent and Decide Who Gets to Play

IRBNet Tracking Number 876236-1

You are invited to participate in a research study about how professional baseball scouts define talent, determine potential, and make prospect decisions. You were selected as a possible participant because you are a veteran in the craft of baseball scouting. You are eligible to participate in this study because you served at least four years as an MLB area scout, and you have 10 or more years of baseball scouting experience at the professional and/or college levels. The following information is provided in order to help you make an informed decision whether or not you would like to participate. Please read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Scott Gines, supervised by University of St. Thomas professor Dr. Thomas Fish from the College of Education, Leadership and Counseling. This study was approved by the Institutional Review Board at the University of St. Thomas.

Background Information

The purpose of this study is to explore how professional baseball scouts make meaning of what they see and how they forecast potential. My research method is simple, flexible, and designed to give professional baseball scouts an opportunity to explain their insights, instincts and decision making processes. I will travel to conduct an in-person interview with veteran baseball scouts and ask five open-ended questions. With the interview data, I will interpret how professional baseball scouts define talent and potential when identifying or eliminating potential Major League prospects.

Procedures

If you agree to participate in this study, I will ask you to do the following things: I will travel to conduct separate individual in-person interviews (lasting 75-120 minutes) with eight to 12 veteran scouts. The in-person interviews will be audio-taped, and I will personally transcribe the audio text of each interview. After I transcribe a participant's interview each participant will have opportunity to review, modify, and/or delete their responses via e-mail. Each participant will electronically receive his transcribed interview in two segments separated by a minimum of 24 hours. The first electronic file sent for review will contain the participant's narrative responses to questions two and four, and the second email will include the participant's narrative responses to questions one, three, and five. Participation in this study is voluntary, confidential, and names of participants will not be used or recorded.

Risks and Benefits of Being in the Study

This study does not include known or foreseeable social or economic risks. Every effort will be made to maintain confidentiality; however, it is remotely possible that some participant responses and/or stories may be recognizable to other professional scouts or collegiate baseball coaches.

As the sole investigator, the actual names of the participants and their assigned pseudonym will be stored as objects in my memory.

Participants in this study will receive no direct benefits.

Compensation

No payment or cost is involved with participation in this study.

Privacy

Your privacy will be protected while you participate in this study. Individual in-person interviews will be conducted at a date, time, setting, and location of your choosing and convenience.

Confidentiality

The records of this study will be kept confidential. The types of records I will create include an audio recording and transcript of each participant's interview. This data will be stored electronically in two password protected computers that require double authentication. Audiotaped, written narrative data, and all physical data will be stored in a locked filing drawer in my professional office, and, while traveling, all audio-taped and physical data will remain in my briefcase and on my person or securely locked in my hotel room safe. The data will be part of the principal investigator's (Scott Gines) dissertation, planned for completion in 2016. The dissertation will only use pseudonyms, and audio recordings will be destroyed within seven days of my successful dissertation defense. If I later publish an empirical study, professional article, and/or book involving the data and/or results of this study, I will not include information that will make it possible to identify you. All signed consent forms will be kept for a minimum of three years upon completion of the study. Institutional Review Board officials at the University of St. Thomas reserve the right to inspect all research records to ensure compliance.

Voluntary Nature of the Study

Your participation whether or not to participate in this study is entirely voluntary. There are no penalties or consequences if you choose not to participate. If you decide to participate, you are free to withdraw at any time up until the completed e-mail review and return of your interview transcript. Should you decide to withdraw upon review of your interview transcript the data collected about you will be deleted and shredded. You can withdraw by contacting me by phone, text, or email. You are also free to skip any questions I may ask.

Contacts and Questions

My name is Scott Gines You may ask any questions you have now and any time during or after the research procedures. If you have questions later, you may contact me at 304-786-0216 or scott.gines@tamuk.edu. You may also contact my dissertation chair, Dr. Thomas Fish, at 651-452-9102 or tlfish@stthomas.edu. You may also contact the University of St. Thomas Institutional Review Board at 651-962-6035 or muen0526@stthomas.edu with any questions or concerns.

Statement of Consent

I have had a conversation with the researcher about this study and have read the above information. My questions have been answered to my satisfaction. I consent to participate in the study. I am at least 18 years of age. I give permission to be audio recorded during this study.

Signature of Study Participant	Date
Print Name of Study Participant	
Signature of Researcher	

You will be given a copy of this form to keep for your records.